THE UNIVERSITY OF ALBERTA

AN EVALUATION OF THE PHYSICAL EDUCATION FACILITIES AND PROGRAMS IN SECONDARY SCHOOLS OF ALBERTA

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SYNOPSIS

The aim of this study was to determine the existing conditions in the Alberta high schools with respect to the physical education program. Considerable emphasis was placed on the extent to which facilities were made available to the senior high schools.

One hundred schools were selected and each one was sent a questionnaire. The schools were selected in such a way that they would serve as a representative sampling of all the senior high schools in Alberta. Of these one hundred questionnaires, seventy-four were completed and returned. The findings of this study were based on the tabulations in those seventy-four questionnaires.

The questionnaire was divided into seven sections: (A) Program of Studies; (B) Equipment and Supplies; (C) Outdoor Areas and Facilities; (D) Indoor Areas and Facilities; (E) Intramural and Interscholastic Program; (F) Utilization of Community Resources; and (G) Certification and Training of Teachers in Physical Education. The questionnaire in its entirety forms Appendix A of this study.

Many phases of the physical education program were found to be poorly conducted. Often this was due to the lack of proper or adequate facilities. A number of recommendations were made which might serve to produce action in strengthening and improving the physical education program in Alberta.

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CHAPTER I

INTRODUCTION

This study is concerned with the problem of the quality of the physical education program in Alberta high schools together with the extent to which facilities help to promote this program. In discussing this problem with various teachers, the author received the impression that there exists a serious lack of physical education facilities in the Alberta high schools. Since these observations were rather limited in scope, a more complete investigation was deemed necessary to obtain accurate data on the existing conditions.

A study of every aspect of physical education facilities in Alberta high schools appeared too extensive for a single survey; therefore, the features considered most important to the operation of a satisfactory program were explored. The topics selected for the survey were designed to give a fairly complete picture of the entire program. A questionnaire was developed as an integral part of this study. The questionnaire appears as Appendix A following Chapter VII.

Further, the data received were compared with standards set up by experts in the field of physical education.

From these comparisons certain suggestions and recommendations have been stated.

Need For The Study

One factor of educational importance is that of facilities. In certain areas of learning particularly, facilities make an important contribution. A man can never become a great scientist, regardless of his ability, if he has no opportunity to use laboratory facilities and techniques.

Physical education is another area in which facilities play an important part. Without facilities a physical education program is extremely limited. Nixon and Cozens[1] state that standards or objectives in physical education include the provision of adequate facilities for all, made attractive as possible and made specifically appropriate to the types of activities needed by the group or individual.

Williams[2] states that adequate facilities are required for physically wholesome activity. He further contends that muscular activity is a basic human need. In filling this need proper tools or facilities are required.

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[1] E. W. Nixon and F. W. Cozens, An Introduction to Physical Education, Philadelphia and London, W. B. Saunders Company, 1947, p.79.

[2] J. F. Williams, Principles of Physical Education, Philadelphia and London, W. B. Saunders Company, 1942, p.250.

The importance of physical education in the school program cannot be overemphasized. It is necessary for proper organic development. It develops safety skills and promotes interest in worthwhile recreation. Its potential, social and psychological contributions are unlimited. Physical education is truly an essential of the "good life."

One of the functions of this study is that of bringing conditions surveyed to the attention of the proper authorities and the public generally. It is hoped that it will serve to stimulate an interest in the physical education program in the high schools of the Province. This study might well serve as an impetus toward improving existing conditions and toward developing more complete and well-rounded programs.

CHAPTER II

PURPOSE AND PLAN OF THE STUDY

Statement of the Problem

The basic problem of this study was to determine (1) to what extent physical education facilities, programs and related factors in the Alberta rural, town and city senior high schools conform to the standards generally recommended by recognized authorities and (2) the standards which are necessary to carry out an adequate physical education program particularly in relationship to participation in all phases of the activity program throughout the year.

Importance of the Study

Since, to the best of the author's knowledge, a study of exactly this kind has never before been undertaken, it is hoped that the material gathered in this study will constitute a basis for similar or continued studies which may serve a useful purpose in the improvement of physical education in Alberta schools.

Supervisors, superintendents, school boards, administrators and teachers interested in physical education in Alberta high schools should find the material gathered in this study of some use in their own personal work, or of

assistance in setting up or revising the administration of the physical education programs.

Interested authorities using this study as a reference may get a picture of the comparison between the status of physical education in Alberta and in the other provinces of Canada. Comparisons have also been made with prescribed standards set up by recognized experts in the field. This investigation should provide criteria against which administrators may evaluate the effectiveness of their physical education facilities and programs. The information gathered in this study, then, may promote improved programs in some schools.

Through this investigation teachers may be assisted to recognize the use of several activities which could be incorporated into the program they are using. This study is of further importance in bringing to the attention of many teachers and principals an approved list of activities recommended for inclusion in the yearly school program.

Scope and Limitations

Various centres of the entire Province were surveyed. Data from all types of schools were incorporated into the findings. The schools ranged from one-room high schools to high schools having more than fifty rooms. One hundred questionnaires were sent out in order to get a fairly representa-

tive sampling of the different kinds of schools in different areas. The study was limited to senior high schools in the Province of Alberta. In the rural centres a school having pupils in any of Grades X, XI or XII was considered a senior high school.

Information gained in this study was limited to material gathered on the basis of the designed score card. The score card was prepared by the author, keeping in mind the varied types of schools surveyed. Where possible, items on the score card were based on La Porte's Score Card No. 2.[1] The author revised the La Porte Score Card No. 2 to bring it into closer harmony with the Alberta situation. As a means of developing the best possible revision, the Sub-committee on Physical Education Curriculum Revision in the Province of Alberta examined and approved the new Score Card.

Method of Procedure

In the 1952 Annual Report of the Department of Education, all high school rooms in operation were listed. To obtain the complete listing of schools by name an additional booklet entitled 'Accredited Secondary Schools in Alberta 1951-52' was consulted.

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[1] W. R. La Porte, The Physical Education Curriculum, Los Angeles University of Southern California Press, 1947, pp. 71-85.

As more than 450 high schools were listed, it was realized that a representative sampling rather than a complete populative survey should be taken. One hundred schools were selected to serve as the sample. These schools were divided into five categories. These categories were: private schools, large city schools, small city and large town schools, town schools, and village or rural schools.

Six privately operated schools were selected. These schools had 1, 2, 4, 5, 7 and 10 rooms respectively. Nine major urban schools were selected from Edmonton and Calgary. Twenty-five schools were selected from the remaining city schools. Some schools from large towns were included in this group. All the schools in this group had five or more rooms. Ten schools were selected from town areas which had fewer than five rooms. Finally fifty schools were selected from village and rural areas.

To assist in obtaining a representative sample the alphabetical list of schools in the booklet, 'Accredited Secondary Schools in Alberta 1951-52,' was consulted. Wherever possible six schools were selected from each page keeping in mind the type and number of schools in the five categories mentioned above. The author felt that through using these two methods of selection a reasonably representative sample of all the schools would be obtained.

A questionnaire based on the approved revision of the La Porte Score Card No. 2 was sent to each of the one hundred schools selected. (A sample of this questionnaire appears as Appendix A of this study.) The La Porte Score Card No. 2 is recognized by outstanding authorities in the field of physical education as containing the best available criteria for evaluating a physical education program. An accompanying letter was sent with each questionnaire, requesting careful and objective recording of information in order to obtain reliable results. One month later a follow-up letter was sent to each of the school principals from whose school no return had been received. A total of seventy-four of the one hundred questionnaires sent out were completed and returned. Many of those replying indicated a positive interest in this study. A number of the administrators requested a summary of findings. This may indicate an interest in raising standards in a number of schools.

Definition of Terms

Curriculum refers to the entire group of courses offered in an educational institution.

Evaluation refers to the appraisal of attainment toward standards or educational goals.

Equipment refers to the material owned by the school which is not part of the buildings or permanent fixtures.

Facilities refers to space, structures and fixtures maintained and operated by the school.

Senior high school indicates a school which conducts courses in any of the Grade X, XI or XII subjects.

Survey pertains to the collected, analysed items designed to obtain information in the most satisfactory way.

Teaching station is that area in which one class is conducted by one teacher.

CHAPTER III

REVIEW OF LITERATURE

Status of Physical Education and its Facilities

Oberteuffer[1] states that physical education may meet particular needs of individuals in a more direct way than through academic courses. He suggests that personal needs can be met through presenting an opportunity for self-expression. Individuality is recognized; initiative and independence are developed through new games and variations of old ones. Also expression of feeling is created through music mood in rhythmical activities. Further, physical education assists individuals to recognize merit and develop self-appraisal. Individuals also can increase their self-sufficiency through the acquiring of skills and attitudes gained in physical education. In addition to these benefits, Oberteuffer suggests that emotional control can be developed more successfully through physical education than through any other course offered in the curriculum.

Oberteuffer shows how social needs can be met as well. Through physical education one learns to work in

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[1] D. Oberteuffer, Physical Education, New York, Harper and Brothers Publishers, 1951, pp. 93, 109, 112, 121, 122.

groups, conform to standards within the group and acquire respect for others. Physical education can serve as a therapeutic tool through redirection of undesirable behavior. This can be achieved by channeling energies and interests into constructive avenues.

Properly conducted, the striving to win can produce wholesome habit-patterns and attitudes in an individual, as this effort can and should mean that one is attempting to do one's best. It must be stressed, however, that winning of itself, is not the end, but a means toward the end. Also, there is developed a wholesome regard for other individuals.

Nash[1] in his book, Character Education Through Physical Education shows agreement with Oberteuffer's ideas. Nash defines character as objective behavior in relation to social and moral codes and conventions involving judgment, discrimination, honesty, integrity, loyalty, socialization and other attributes. In extensive case studies and studies of school programs made by Nash, it was shown that through physical education there was an enrichment of the life of youth in producing higher values of creative expression, constructiveness and appreciative insight.

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[1] J. B. Nash, Character Education Through Physical Education, New York, A. S. Barnes and Company, 1932, pp. 44, 101, 215-221.

Williams[1] in his book, Principles of Physical Education states that an adequate education will include worthwhile experiences in physical education, for it promises opportunities for the development of skills, interests and attitudes which are physically, mentally and socially stimulating and satisfying.

Dewey[2] defines education as the reconstruction of experience which in turn forms the foundation for future experiences. With this definition Williams and Brownell[3] agree, and state that physical education conforms to this principle, since it educates through the physical experiences of the individual. Physical education is primarily a way of living and seeks to conduct its activities so as to set a standard that will surpass the average and commonplace.

Bulletin 4, Program of Studies,[4] authorized by the Department of Education, Province of Alberta, states that

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[1] J. F. Williams, The Principles of Physical Education, Philadelphia, W. B. Saunders Company, 1942, pp.251, 252.

[2] J. Dewey, Democracy and Education, New York, The Macmillan Company, 1929, pp.89, 90.

[3] J. F. Williams and C. L. Brownell, The Administration of Health and Physical Education, Philadelphia, W. B. Saunders Company, 1946, pp.11-12.

[4] Bulletin 4, Program of Studies, Elementary School Physical Education, authorized by the Department of Education for Alberta, Edmonton, King's Printer, 1951, p.3.

physical education contributes to the total development of the child as an integral part of the educative process. Physical education regarded in this way becomes education by means of activity. Its aims are in harmony with those of other programs of education.

Exercise is necessary for the development of vital organs. Physical education, therefore, plays an important part in fostering desirable organic development. Further, it is a well known fact that grace, poise and co-ordination contribute greatly to a well integrated personality. To sum up, physical education activities not only promote physical skills and organic strength, but also lead the child to acquire characteristics and qualities essential to the demands of society and to the realization of his highest self.

With respect to facilities in particular, Hughes[1] states that directors of physical education in schools and colleges are attempting to realize the aim of physical education, not only by securing educational leadership, but by providing adequate facilities as well. The greater problem is to provide adequate facilities. The necessary facilities fall into two classes, indoor and outdoor, and while

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[1] W. L. Hughes, Administration of Health and Physical Education in Colleges, New York, A. S. Barnes and Company, 1935, p. 348.

it is generally recognized that outdoor activities are far more healthful, the indoor equipment is equally essential because so many days during the school year are not conducive to outdoor play. This aspect is of particular importance to Alberta schools because of the length and severity of the winter season.

Blair[1] comments that no other single course at the secondary school level has been subject to so much mandatory legislation, has cost so much for facilities and equipment in proportion to per pupil use or has such a variety of facilities considered essential for its proper development, as has physical education. Physical education is recognized as a vitally important unit in the secondary school curriculum.

Williams and Brownell[2] state that facilities condition what one can accomplish. Limited facilities are nothing more than challenges to a progressive administrator. Lack of them is an obstacle in his way to the realization of his hopes for children.

Related Studies

Careful perusal of current periodical literature in

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[1] H. Blair, Physical Education Facilities for the Modern Junior and Senior High School, New York, A. S. Barnes, 1938, p.3.

[2] Williams and Brownell, op. cit., p.253.

the field of physical education including The Athletic Journal, Scholastic Coach, Journal of Health, Physical Education and Recreation, and the National Recreation Association's periodical Recreation identified only one article which had a direct bearing on this study. This article was found in the January 1953 issue of Scholastic Coach. The title of the article was "A Survey of Physical Education Facilities " by Joseph A. Guerrara[1] (Baldwinsville N.Y.)

Guerrara distributed a questionnaire to 269 junior high and senior high schools of New York State. Information tabulated was considered to have such practical value that a committee was set up to interpret the data and make recommendations to prospective schools. In brief, the salient questions asked by Guerrara, together with results of opinions are shown in Table I.

With respect to the question, "Who or what were the determining factors in establishing the size of the gymnasium?" the data shown in Table II were obtained.

Guerrara also compared the enrolment of the various schools with the sizes of the gymnasia. His comparison is given in Table III.

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[1] J. A. Guerrara, "A Survey of Physical Education Facilities," Scholastic Coach, January 1953.

TABLE I

PREFERENCES OF NEW YORK STATE SCHOOL ADMINISTRATORS

	Questions Submitted	Yes	No
1.	Do you have a combination gymnasium auditorium?	68.3%	31.7%
2.	If you have a combination gymnasium auditorium do you recommend such an arrangement?	.06%	99.94%
3.	Do you have an individual corrective room?	4.96%	95.04%
4.	Do you have a swimming pool?	2.3%	97.7%
5.	Do you have adequate physical education facilities?	17.6%	82.4%
6.	Do you have bowling facilities?	2%	98%
7.	Do you have a room for wrestling?	4%	96%
8.	Do you have a rifle range?	9%	91%
9.	Do you have table tennis facilities?	3%	97%
10.	Do you have shuffleboard facilities?	1%	99%
11.	Was the gymnasium adequate when completed?	71.6%	28.4%
12.	Is the gymnasium adequate now?	25%	67%
	No response	8%	

TABLE II

FACTORS DETERMINING SIZE OF GYMNASIUM

Factors	Percentage
Miscellaneous	22
Educational Department	21
Cost	17
Enrolment	12
Architect	11
Board of Education	8
Principal	5
Program	2
Staff	2

TABLE III

COMPARISON OF THE ENROLMENT OF THE VARIOUS SCHOOLS WITH THE SIZES OF THE GYMNASIA IN NEW YORK STATE

Student Enrolment	No. of Cases	Gymnasium Sizes	
		Minimum	Maximum
0 - 200	6	35 x 50 x 20	66 x 80 x 22
201 - 400	43	29 x 30 x 12	66 x 80 x 22
401 - 600	66	30 x 48 x 14	72 x 94 x 30
601 - 800	57	30 x 55 x 14	80 x 100 x 30
801 - 1000	35	40 x 60 x 14	80 x 108 x 30
1001 - 3500	39	40 x 60 x 19	95 x 110 x 30

Research with respect to physical education programs in Alberta is all but non-existent. Only four of the various studies available have a direct bearing on this study, although a few other studies have touched on data related to certain parts of the survey.

In 1943, Arthur Eriksson[1] made a survey of physical education and health in representative one-room rural schools in Alberta. Included in his study is information concerning numerous phases of the physical education program in the rural school areas. Although Eriksson's study pertained only to the small schools in rural areas, it is significant to note that based upon his conclusions he offered the following general recommendations.

1. A greater percentage of teachers should have additional training in physical education, health and safety.

2. The physical education program should be conducted daily and the period should be no less than twenty-five minutes in length. More time should be spent on dual activities, such as horseshoes, croquet, badminton, tennis and tether ball.

3. More attention should be paid to individual differences.

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[1] Arthur W. Eriksson, "A Survey of Physical Education and Health in Representative One-room Schools of Alberta," (Unpublished Master's thesis, Department of Physical Education, University of Washington, 1943), et passim.

4. The school buildings should be used as a community recreation centre.

Panton[1] carried out a study of intramural programs in the four Western Canada Universities and selected Junior Colleges and Senior High Schools in the four Western Provinces of Canada.

The purpose of Panton's investigation was to make a study of the various intramural programs in operation in Western Canada and to appraise these programs with a view to recommending to educators a better understanding of the present limitations and the future possibilities of intramural athletics.

In his summary relating to the Senior High School, Panton indicated that there was a definite interest in the intramural work. Many of his conclusions merit consideration. Included in the findings was a serious lack of gymnasium facilities in at least ninety percent of all schools. Panton pointed out that indoor facilities are of paramount importance in Canadian schools where the severity of the winter season makes it essential to have an adequate indoor program. He also found a lack of trained physical education

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[1]James Hayes Panton, "A Survey of Men's Intramural Programs in Universities and Secondary Schools in Manitoba, Saskatchewan, Alberta and British Columbia and a Suggested Plan for Organization in Secondary Schools." (Unpublished Master's thesis, Department of Physical Education, University of Washington, 1948), et passim.

personnel. This deficiency he felt was one of the prime difficulties facing the administration of Western Canadian schools. The investigation clearly pointed out that there was an increasing interest in intramural work among the school administrators and teachers. It is obvious that educators have been giving the intramural program much consideration, but lack of facilities has been retarding the work to a great extent.

The study made by Hughes[1] in 1946 dealt with a survey and evaluation of the physical education program in the secondary schools in the Greater-Victoria, British Columbia area. This study was limited to five Senior High Schools and one Junior High School. The results showed that even in a city which is reasonably well-to-do, economically, the facilities and program do not measure up to accepted standards. Facts indicated that the program of activities was not too well organized. Indoor locker and shower areas were inadequate. Swimming pools and swimming programs were found to be practically non-existent. Medical examinations and health services were however reasonably well conducted. Intramural programs also were quite well conducted.

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[1]Richard L. Hughes, "A Survey of the Physical Education Programs in the Secondary Schools of Greater Victoria, British Columbia Area." (Unpublished Master's thesis, Department of Physical Education, University of Washington, 1946), et passim.

McLachlin,[1] in his survey of Alberta city schools, obtained data which revealed that the program of activities was below an accepted standard. In his section relating to Summary and Conclusions, McLachlin stated that most city schools lacked detailed yearly outlines. Little or no encouragement was given to a recreational program for the faculty. Dealing with facilities, McLachlin discovered that the city schools, generally, lacked proper outdoor facilities. The schools were found to have satisfactory supplies and equipment for class instruction.

Medical services and health facilities were found to be adequately provided, but there was a notable lack of properly trained physical education teachers. Interscholastic and intramural programs were found to be well conducted and well administered. Both these programs were well controlled.

In his section relating to Recommendations, McLachlin stated that periodic surveys of the programs should be conducted in order to assist the upgrading of physical education in the Province. It is hoped that to a degree the results of this study will assist in revealing

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[1] Herbert J. McLachlin, "A Survey of the Physical Education Curriculums, Facilities and Administrative Organizations in the Senior High Schools in the Cities of the Province of Alberta, Canada." (Unpublished Master's thesis, Department of Physical Education, University of Washington, 1952.) pp.59-66.

any trends in the program as well as various aspects not noted in McLachlin's study.

Also recommended, was the development of some Canadian physical education score cards. It is hoped that the score card developed by the writer will serve as a basis for the development of a satisfactory, complete score card which will apply to the Canadian situation as La Porte's[1] score card does to the American situation.

Watkin[2] discovered that seventy-six percent of the high schools he surveyed have a definite schedule of athletics. In almost every case he surveyed, Watkin found that the principals felt strongly that good sportsmanship was fostered through the athletic program. Watkin's study dealt mostly with skiing, speedskating, swimming, track and field, and several other group athletic activities. Part of his study was devoted to an intensive outlining of the Banff High School program.

Jonason[3] in his survey of school grounds, found

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[1] La Porte, op. cit.

[2] J. F. Watkin, "Extra Curricular Activities in Alberta High Schools." (Unpublished Master's Thesis, Department of Arts and Science, University of Alberta, 1938), pp.48, 50, 51.

[3] C. J. Jonason, "A Survey of School Ground, School Plant and Teacherage Conditions in Eighty Schools Situated in Central and Northern Alberta." (Unpublished Master's Thesis, Department of Arts and Science, University of Alberta, 1940), pp.13-16.

that one third of all the schools surveyed had made no attempt at any time to beautify the school grounds. Jonason found a number of the general school facilities lacking or inadequate for the conduct of a satisfactory physical education program.

A careful analysis of the above mentioned studies indicates a lack of adequate facilities and trained personnel to conduct an effective program. It is hoped that the present study might reveal other areas not explored, confirm or reject information gathered in the related studies, make some practical suggestions for overcoming the deficiencies revealed and present further data and recommendations which will be found helpful to those concerned in raising the general standards of the total school plant and also to those involved in revising the physical education curriculum.

CHAPTER IV

AN ANALYSIS OF THE QUESTIONNAIRE

The material contained on the initial page of the questionnaire used in this survey and also placed as Appendix A to this study, requested administrative information. This included the name, the superintendent and the principal of the school, as well as the name of the scorer and his status on the staff. Also requested were data relating to the enrolment, dormitory facilities and bus services. Scoring directions were set down in concise, clear form and a specific example was shown to ensure complete understanding of the scoring method to be used.

The questionnaire was divided into seven sections: (A) Program of Studies; (B) Equipment and Supplies; (C) Outdoor Areas and Facilities; (D) Indoor Areas and Facilities; (E) Intramural and Interscholastic Programs; (F) Utilization of Community Resources; (G) Certification and Training of Teachers in Physical Education. Section F was optional. Only the scorers who felt that their school facilities were inadequate, were asked to check this section. Section F was designed to gain additional information, although the results had no bearing on the rating of the school with respect to facilities and equipment.

With the exception of three items, the first part of sections A, B and E respectively, all the questions were designed so that five possible responses could be made. The scorer was requested to check the response which most closely fitted the situation in his school. As an added convenience, five numbered circles were placed directly to the right of the five responses related to that question. The scorer merely placed a check mark in the appropriate circle. Appendix A is the complete questionnaire in the form sent to the various schools.

The first item of section A in the questionnaire listed thirty-one activities carried on in a complete physical education program. The scorer was requested to check those activities which his school carried on in its regular program. The thirty-one activities listed were taken from the approved and recommended activities for high schools in Alberta.

The first item of section B listed twenty-eight different types of equipment which might be available in the school. The equipment owned by the school receiving the questionnaire was to be checked off. Equipment considered most essential for the conducting of an adequate program was assigned a higher value when the questionnaire was scored.

The first item of section E listed twenty-four of the most common activities included in an intramural and

interscholastic program. The scorer was asked to check the activity, indicating whether it was of an interscholastic or intramural nature. For added convenience, two columns with the headings intramural and interscholastic were placed to the right of the listed activities. At the conclusion of each item in sections A, B and E, the scorer was asked to list any activities or equipment which were not found in the questionnaire but which were in existence in his school.

All items accompanied by the five check circles were assigned point values. In sections A, B, C, D, E and F, all circles numbered 1 carried a value of five points, circles numbered 2 carried a value of four points, circles numbered 3 carried three points, circles numbered 4 carried two points and circles numbered 5 carried a value of one point or no points. One point was awarded the item which referred to a weak attempt at contributing to the program, and no points were awarded when no contribution was made.

Section G, Part I, was awarded one point for every circle checked. In Part II, three points were given for each "yes" circle checked. In Part III two points were given for each "yes" circle checked. In Part IV, points were given in the following manner: (a) row one, circle 1--five points; circle 2--ten points; circle 3--fifteen points; circle 4--twenty points and circle 5--twenty-five points. (b) row two, circle 1--three points; circle 2--

six points; circle 3--nine points; circle 4--twelve points and circle 5--fifteen points. (c) rows three and four--circles were valued at two, four, six, eight and ten points respectively.

In Section A point values were awarded as follows: (a) each of the dancing activities--six points; (b) each of the team sports--three points; (c) stunts and tumbling activities--three points; (d) apparatus activities--two points; (e) individual and dual sports--two points each; (f) additional sports, including recognized activities added to the approved list--one point each. The weighting was based on the outline of courses in the approved Alberta program.[1]

Section B, Part I, was given a value of two points for each item checked on the list with the exception of the springboard, rings, climbing rope and discus or shot put, each of which was given one point when mentioned. Those last items were not considered so essential to conducting an adequate program as were the remaining twenty-three items.

In Section D, Part II, point values were given in the following manner; (a) items 1 and 6 were valued at five points each; (b) items 2, 14 and 18 were valued at four points each; (c) the remaining items were valued at two

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[1] Programme of Studies for the High School, Bulletin 3. King's Printer, Edmonton, 1946, pp.5-17.

points each. The point distribution here was based on the amount of use to which the equipment would be put, as well as the number of people accommodated by the equipment or supplies.

In Section E, Part I, two points were given for each intramural or interscholastic activity checked. Section F was thought useful to supply certain pertinent information relative to the other sections. Because many schools did not or could not make use of community facilities, Section F was optional and the score obtained was not used in determining the aggregate total for the school.

The total score possible was 160 for section A, 75 for section B, 30 for section C, 70 for section D, 150 for section E, 35 for section F and 100 for section G. The highest total score any school could obtain was 585.

CHAPTER V

RESULTS OF THE SURVEY

The present survey revealed many of the conditions under which physical education programs have been conducted in various types of schools in Alberta.

TABLE IV

RANGE OF SCORE AND TYPE OF SCHOOL IN SECTION A

School Code Lettered	Type of School	Grades Taught	Total for Sec.A.
AN	Town School	10-12	119 points
CR	Private School	1-12	23 points

Table IV shows the range in the extent to which the program is carried out in different schools. Of a possible 160 points the school obtaining the highest score for section A received 119 points. The lowest score was 23 points received by school CR.

Table V gives a general picture of the ratings received by various types of schools. Schools in the two largest centres of the province received the highest score.

TABLE V

AVERAGES OF SCORES OF DIFFERENT CLASSIFICATION OF SCHOOLS IN THE DIFFERENT AREAS OF THE SURVEY

Kind of School	Program	Equipment	Outdoor Facilities	Indoor Facilities	Intramural and interscholastic	Certification	Total
Edmonton and Calgary	81	38	13	29	52	7	220
City Schools or Town Schools of 5 or more rooms	91	47	15	28	55	17	253
Private Schools	64	29	11	24	34	11	173
Town Schools of 4 or fewer rooms	71	27	13	16	40	9	176
Rural Schools and Village Schools	69	21	15	8	34	5	152

Rural schools received on the average the lowest rating of all the various types of schools.

Thirteen schools showed 80 per cent of all the high school pupils participating regularly in physical education classes. Fifteen schools indicated 60 per cent to 80 per cent of the pupils participating in regular physical education classes. In twenty-three of the schools, only forty per cent to 60 per cent of the pupils participated in regular physical education classes. In the remaining twenty-three schools fewer than 40 per cent of all the enrolled pupils participated in regular class work in physical education.

Twelve schools gave courses resulting in credit for both Physical Education I and Physical Education II. These twelve schools were located in towns or cities. Twenty schools indicated that their physical education program did not adhere to either the Physical Education I or Physical Education II outlines.

Twenty-two schools indicated that their average physical education class numbered under twenty pupils. Nine of the seventy-four schools from which returns were received, indicated that their average physical education classes exceeded thirty pupils. The remaining schools indicated that their physical education classes ranged from twenty to twenty-nine pupils.

A specific item was devoted to ascertaining the amount

of dancing taught in the schools. The dancing program might include folk, square and social dancing. Ten of the schools stated that six weeks of the Physical Education program was allotted to dancing activities. Forty-nine of the schools indicated that, of the year's program, dancing took three or fewer weeks.

The item, in section A, which referred to team sports gave the school an opportunity to select any (or all) of the ten activities listed under that heading and to indicate the amount of time, in weeks, during which the entire school participated in team sports. Table VI reveals the data received in that item. A few schools had enrolments so small that team sports could not be carried on adequately. One school had an enrolment of thirteen high-school students, including both boys and girls. This school had little opportunity for participation in team sports.

TABLE VI

TOTAL NUMBER OF WEEKS SCHOOLS PARTICIPATED IN ORGANIZED TEAM SPORTS

	14 or more weeks	12 weeks	10 weeks	8 weeks	6 weeks or fewer
Number of Schools	35	12	8	8	11

Table VII shows an item which was devoted to the assessment of time allocation to tumbling and apparatus work.

TABLE VII

NUMBER OF WEEKS ANNUALLY DEVOTED TO TUMBLING AND APPARATUS WORK

	Four weeks or more	Three weeks	Two weeks	One week	No time reported
Schools participating in tumbling	19	11	7	4	33
Schools participating in apparatus work	7	5	7	-	55

The results of Table VII indicate that tumbling and apparatus work is not carried on extensively. In Alberta where the winter weather is severe and pupils are restricted to indoor classes, one would expect this activity to be carried on to a greater degree. A combination of teacher inexperience and lack of facilities probably is the cause of this situation.

The item referring to individual and dual sports pertains to the seven activities listed in Section I, Part A. These were deemed to be the most important items of an individual or dual nature since they provide healthy,

vigorous activities and result in the acquisition of skills which serve to produce valuable leisure participation and enjoyment. Eleven schools carried on these activities for seven or more weeks. Eighteen schools had a five week program of these activities. Seventeen schools operated a program of three weeks' duration. The remaining forty-one schools devoted two weeks or less of the school year to these specific individual and dual activities.

A list of nine activities was set down under the section "Additional sports and individual activities." Other items were accepted, if listed, and were felt to be of a contributing nature to the physical education program. Twelve of the schools carried on a reasonably extensive program in this department, devoting ten or more weeks to these additional activities. Ten schools set apart eight weeks of the year for these activities. Nine of the schools devoted five weeks to these additional sports. Thirteen schools conducted these activities for three weeks each year. The remaining thirty schools devoted one week or less to these additional activities.

Another item in the section "Program of Activities" dealt with the methods used in planning the physical education program for the year. Five basic aspects of a sound program were listed. Only seven of the schools considered as many as four of these basic aspects when setting up their

school program. Nine schools took into consideration three of the aspects which were mentioned. Nineteen schools used two of the basic aspects in building their program. Eighteen schools, when organizing the physical education program used one of the aspects mentioned. The remaining twenty-one schools gave no consideration to any of the basic program planning aspects. It seems apparent that most teachers and administrators are not aware of the basic considerations which should be used when planning a Physical Education program. Some schools rated high in most other departments but dropped on this item. The teachers and administrators in these schools seem to be genuinely attempting a good physical education program but appear to lack the knowledge of the basic essentials for the planning of the overall program.

Only three of the schools averaged five standard periods per week in physical education. Eleven schools averaged four periods per week. The majority of schools had a two- or three-period-per-week plan, with thirty-four schools on a three-period-per-week and twenty on a two-period-per-week program. The remaining six schools averaged one or fewer periods per week. This condition prevails in many cases because of insufficient indoor space in relation to the number of classrooms in the school. A twelve-room school based on an eight period school day could operate with a maximum of three-periods-per-week in the one teaching station.

TABLE VIII

LENGTH OF PHYSICAL EDUCATION PERIODS IN A SAMPLE OF ALBERTA HIGH SCHOOLS

Period Length	50 mins. or longer	40-50 mins.	30-40 mins.	20-30 mins.
Number of Schools	4 schools	10 schools	44 schools	16 schools

Table VIII illustrates the length of class periods in physical education. The majority of schools had periods between thirty and forty minutes in length.

The main outdoor area for use in class periods for forty-one of the schools was within forty yards of the school. The pupils from eighteen schools went forty to eighty yards from the building to the outdoor playing field. Ten schools had the main playing field one hundred yards from the school. The remaining six schools had their main playing field more than one hundred and twenty yards from the school.

None of the schools devoted more than half of their physical education periods in the actual teaching of the fundamental skills and techniques. Seven of the schools spent half the time on the teaching and practice of the fundamentals. Seventeen of the schools devoted 30 to 50 per cent of the physical education program to the fundamentals

of the various activities. Twenty-five of the schools have an average of 10 to 30 per cent of the class periods set apart for teaching and practice of fundamentals. The remaining twenty-five schools devote less than 10 per cent of the physical education period to the fundamentals of the activities in their program.

Co-educational activities are recommended as desirable to the all-round development of the individual.

TABLE IX

TIME DEVOTED TO CO-EDUCATIONAL ACTIVITIES IN A SAMPLE OF ALBERTA SECONDARY SCHOOLS

Time of Program	Six Weeks or more	Four Weeks	Three Weeks	Two Weeks	Negligible
Number of Schools	15	9	6	7	37

Half of the schools have a negligible amount or no co-educational activity in their physical education programs.

In only four schools were the pupils divided into classes on the basis of a classification system involving knowledge, experience and ability. Three schools divided their students on an approved classification system, i.e. the McCloy[1] system or one of a similar nature. The McCloy

[1] C.H. McCloy, Tests and Measurements in Health and Physical Education, Appleton-Century-Crofts Inc. New York, 1954, pp. 59, 60.

system employs a specific formula taking into account age, height and weight. Seven schools divided their classes on the basis of age distinction, weight distinction or both. In the remaining sixty schools the academic classes were used as physical education classes, or divisions were made on an alphabetical basis. In most cases regular classes were used to simplify supervision and administration. In the rural and small town schools, where the enrolment was not high, it was not feasible to use an involved classification system. All three of the schools which used a recognized classification system were city schools.

When rating the pupils in the physical education course, twenty schools took into consideration knowledge, skill improvement and attitude. Five schools based their rating on the pupils' skill improvement together with written tests. Six schools based their marks on the improvement shown by the pupils on standardized tests. The remaining forty-three schools based the pupils' marks on opinions gained through observation by the teacher during class periods. Generally, teachers have not employed the available measures of attainment for comparison of pupil achievement in the physical education field.

Twenty-one of the schools supplemented their regular program with moving pictures related to the current activities. Five schools used film strips on current activities.

Eleven schools supplemented their program with available films or film strips. Five schools indicated that study and discussion of physical education periodicals supplemented regular class work. The remaining thirty-two schools gave no indication that any supplementary work was carried out in their schools. Many schools did not avail themselves of useful and free teaching aids.

The section relating to "equipment and supplies" was allocated a total of seventy-five points. Table X shows the distribution of points in this section. The twenty-seven pieces of equipment listed in item I were selected from approved lists.[1,2]

Table X indicates the point allottment for five items in this section of the questionnaire. Item I indicates the point allottment for the equipment and supplies of the check list. With the exception of the springboard, rings, climbing rope, discus and shot put, each check list item received a value of two points. The total score for item I, section B, was fifty points composed of twenty-three two-point items and four one-point items.

Schools which used additional equipment, not

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[1] La Porte, op. cit., pp.16-23.

[2] Participants in the National Facilities Conference, A Guide for Planning Facilities for Athletics, Recreation, Physical and Health Education, The Athletic Institute Inc., Chicago, Illinois, 1947, pp.33-47.

TABLE X

POINT ALLOCATION FOR PART "B" (EQUIPMENT AND SUPPLIES)

	Item I	Supplement to Item I	Points	Item II	Item III	Item IV	Item V	Item VI
Points allotted to items	23 parts @ 2 points each	Spring-board	1	Maximum of 5 points	Maximum of 5 points	Maximum of 5 points	Maximum of 5 points	Maximum of 5 points
		Rings	1					
		Climbing Rope	1					
		Discus & Shot Put	1					
Total for "B"	46		4	5	5	5	5	5

included in the list, were encouraged to specify the extra equipment, and credit was awarded when the equipment contributed to the basic program of activities. Only one school scored over forty points on item I in this section. Ten schools rated between thirty-one and forty points. Twenty-three schools rated between twenty-one and thirty points. Sixteen schools scored from eleven to twenty points. The remaining twenty-four schools obtained a rating of ten or fewer points. The schools that scored extremely low on this item were the same schools that scored very low on many items in the "program of activities" section.

Table XI illustrates the exact number of schools possessing equipment listed in item I, part B of the questionnaire.

An item devoted to hygiene in respect to costume and shower revealed that no school operated with proper physical education clothing, shower, locker or towel storage facilities. Only three schools had proper facilities for four of these five necessities. Nine schools had adequate facilities for three of these. Fourteen schools provided equipment and facilities for one or two of those requirements specified. The remaining forty-eight schools provided none of these items of equipment or facilities.

TABLE XI

NUMBER OF SCHOOLS POSSESSING SPECIFIC EQUIPMENT AND SUPPLIES

Equipment or Supplies	Number of Schools	Equipment or Supplies	Number of Schools
Basketballs	39	Measuring tape	31
Footballs	31	Record player	59
Soccer balls	21	Records for rhythms	21
Volleyballs	39	Softballs	58
Jumping standards	41	Softball bats	50
Tennis nets	10	Springboard	27
Tumbling mats	29	Parallel bars	13
Badminton nets	28	Box horse	30
Badminton rackets and presses	16	High bar	6
Tennis rackets and presses	5	Rings	6
Catcher's mask and chest protector	35	Climbing rope	4
Goal pads	35	Baseballs	41
Stopwatch	20	Baseball bat	45
		Discus and Shot Put	26

Table XII illustrates the extent to which the schools aided the pupils by making available to them equipment for winter sports. Over 70 per cent of the schools did not

supply the pupils with any equipment for the five winter sports mentioned.

TABLE XII

WINTER SPORTS EQUIPMENT SUPPLIED BY SCHOOLS

	No. of Schools supplying all Five	Four items supplied	Three items supplied	Two items supplied	One item supplied	None supplied
1 Skis 2 Skates 3 Hockey Players' Costumes 4 Goal Tenders' Equipment 5 Hockey Sticks	0	2	3	0	11	58

Table XIII shows the degree to which costumes and outfits are supplied to the pupils. Specifically this table refers to five items of dress such as (1) basketball uniforms, (2) football gear, (3) full equipment in any other team sport other than basketball or football, (4) sweaters, (5) miscellaneous items such as running shoes, T-shirts, caps etc. This table shows that almost half of the schools

made no attempt to assist the pupils toward proper participation in a recognized sport by making available for them uniforms or costumes. In many instances, merely supplying equipment has done much to foster a healthy school spirit.

TABLE XIII

UNIFORMS AND OUTFITS SUPPLIED BY SCHOOLS FOR PUPIL USE

	Five Items	Four Items	Three Items	Two Items	One Item	No Items
Number of Schools Supplying Dress	0	4	5	10	15	40

One item was devoted specifically to softball. These figures indicate that softball holds an important place in the Alberta physical education program.

TABLE XIV

SOFTBALL EQUIPMENT SUPPLIED BY SCHOOLS

Equipment including balls, bats and gloves	Equipment for five or more teams	Equipment for three or four teams	Equipment for two teams	Equipment for one team
Number of Schools	12	10	8	11

Finally in section B, relating to supplies, an attempt was made to assess the physical education library in the schools. One school had one or more books or periodicals dealing with physical education for each pupil enrolled. Two schools had libraries serving two to five pupils with one book or periodical. Three schools had one book or periodical for from six to ten pupils. Twelve schools supplied one book or periodical for ten to twenty pupils. The remaining 57 schools had fewer than one book or periodical for each group of twenty pupils in the school. Many and varied are the books and periodicals available in the field of physical education. Most pupils find this type of literature both interesting and educational. It would seem that the majority of schools are missing an excellent opportunity of having pupils gain information in physical education as well as integrating physical education with other school subjects.

The section dealing with outdoor areas was made up of six items. Item I was concerned with the playing surface area on school property. Two schools obtained the commendable record of having more than fifteen acres of playing surface. Five schools had available ten to fifteen acres for pupil use. Fifteen schools owned five to ten acres. Thirty-eight schools had two to five acres of playground space. The remaining fourteen schools had some

property for playground use, but it was less than two acres. Almost all the schools scored well on this item. It is encouraging to note that when schools are being constructed, the planners are taking into account the large area of playground required to carry on various activities simultaneously.

Only five schools, however, could boast of a playground surface of turf in excellent condition. Eleven schools stated they had turf for playing surfaces, but that the turf was in poor condition. Seven schools specified that the ground area was reasonably level, but that there was little grass. Twenty-eight schools claimed to have a fair field, but little or no upkeep was provided. The remaining twenty-three schools mentioned that they had no regularly maintained field. It appears, then, that outdoor facilities with respect to area are adequate, but that poor maintenance or lack of maintenance is hampering the carrying out of effective full-scale physical education programs.

Thirteen schools had a link fence encircling the school property and were suitably landscaped. Seven schools had their yards enclosed by a hedge. Nine schools marked their property lines by means of trees. Two schools marked their property lines by means of shrubs. The other forty-three schools employed no particular plantings or fencing to mark off the playing surface of the school. One might assume that the school property could readily be enhanced

and neatly marked off by the planting of hedging shrubs and trees. This could be made a school project in which all the pupils would take part. If appreciation of nature and her beauty is one of the qualities which pupils are encouraged to cultivate, perhaps a project of this nature would assist in cultivating this attribute.

Sixteen schools had two or more jumping pits filled with suitable material for high and broad jumping. Twenty-nine schools had two pits filled with sand or loosened earth. Eight schools had one pit which was considered to be in an unsatisfactory condition. The remaining sixteen schools did not indicate that they had a jumping pit of any type.

One school had fixtures in the outdoor area to provide for five of the following activities: handball, tennis, basketball, soccer, volleyball and softball. Four schools had fixtures which would permit the playing of four of these activities. In another seventeen schools three of these activities were made possible through permanent fixtures. Twenty-four schools had fixtures permitting two of these activities. An additional twenty-one schools had fixtures for only one of the activities mentioned. The remaining seven schools did not indicate that there were any permanent fixtures which could be employed for physical education activities. It would seem that many schools have

large playground surfaces not specifically set up for designated activities. A few simple fixtures such as posts and basketball hoops would convert unused space to an activity area.

Six schools had four or five of the following major outdoor facilities: baseball diamond, football field, running track, spectator stands and all-weather hard surface areas. Thirteen schools were equipped with facilities for three major activities. Seventeen schools had two of the facilities listed. Twenty-one schools had, as part of the school grounds, one of the five facilities set down. Seventeen schools had none of the facilities for these five major activities.

Another section dealt with the indoor facilities of the school. The first item in this section was concerned with the main area in the school in which physical education classes could be administered. Only one school had both a gymnasium and a swimming pool. Six schools had a gymnasium exclusively for sports and physical education activities. Twenty-five schools had a gymnasium-auditorium, i.e. the area was constructed to serve two purposes. Three schools used a large hall for their activity program. Thirteen schools had, for their indoor facilities, one room set aside primarily for physical education purposes. It is unfortunate that one of the most essential activities in a

TABLE XV

POINT ALLOTTMENT FOR ITEM II, PART D (INDOOR FACILITIES)

Part No. on questionnaire	Five point facilities	Four point facilities	Two point facilities
1	gymnasium		
6	shower		
2		instructor's office	
14		sanitary facilities	
18		supply room	
3			apparatus room
4			storage room
5			locker
7			footbath
8			pupil storage unit
9			towel change
10			volleyball fixtures
11			badminton fixtures
12			basketball backboards
13			restroom
15			health service room
16			bleacher accommodation
17			proper lighting
19			corrective room

proper physical education program, namely swimming, can be carried out in only one school.

Table XV illustrates the point distribution of the check list item. The total value for this item was fifty points. Only one school gained a score of more than forty points. Only one school scored between thirty and forty points. Thirteen schools scored between twenty and thirty points. Another fourteen schools had scores ranging from ten to twenty points. The remaining forty-five schools scored nine points or less on this item. This shows an extremely serious lack of proper facilities for the conducting of any physical education program. A school scoring very low on this item would, of necessity, be rated low on the program of activities.

With respect to the floor area of the main indoor teaching station, it was found that one school had a floor surface area exceeding 8,000 square feet. Eight schools had floor surfaces ranging in area from 5,000 to 8,000 square feet. Another fourteen schools operated on a 2,500 square feet to 5,000 square feet surface. Ten schools had floor areas for their physical education classes ranging from 1,000 to 2,500 square feet. None of the remaining forty-one schools showed that their floor area was as great as 1,000 square feet. A room 32' x 32' would exceed 1,000 square feet in floor area. It is obvious that most of the

TABLE XVI

NUMBER OF SCHOOLS POSSESSING SPECIFIC FACILITIES AND SERVICES

Facilities and Services Supplied	Number of Schools
Boys' and girls' gymnasium	5
Physical instructor's office	3
Apparatus room	10
Storage room for equipment	22
A locker and basket per pupil	7
Shower facilities	18
A footbath	1
Pupils' clothing storage facilities	9
Changing towels	3
Fixtures for volleyball net	40
Fixtures for badminton net	24
Basketball backboards	38
Restroom with cot	21
Proper sanitary facilities	41
Health service room	8
Bleacher accommodation	10
Recessed non-glare lighting	15
Supply room	8
Room for corrective physical education	3

physical education teaching stations are little more than a standard academic classroom.

Four schools had ceilings higher than twenty-five feet in their main activity unit. Ten schools showed ceiling heights of from twenty-two to twenty-five feet. Eleven schools had ceilings ranging from eighteen to twenty-two feet in height. Thirteen schools were found to have twelve to eighteen feet ceilings. The other thirty-six schools indicated ceiling heights no greater than twelve feet. These thirty-six schools would be forced to eliminate or modify greatly many important indoor activities because of the height restriction.

Another item in this section dealt particularly with the number of activities which could be carried on simultaneously in the indoor area designated for physical education. The activities were to be selected from the list of activities given in Item I, Section A, of the questionnaire. Three schools reported that more than four activities could be carried on at one time. Seven schools reported that four activities could be carried on simultaneously. Ten schools could accommodate three activities at the same time. Nineteen schools stated that the area would permit two activities to be conducted at the same time. Thirty-five schools had area for only one activity at any given time.

In the Province of Alberta, where so much of the school

year is in the severe winter season, it would seem imperative to have a reasonable standard of equipment and facilities for the conducting of good indoor programs. The information made available through Section D of this survey has revealed the serious lack of such essential facilities.

Section E of the questionnaire requested information concerning the extent to which intramural and interscholastic sports were conducted. Item I in this section was made up of a double check list, i.e. one for intramural activities and one for interscholastic activities. Of the one hundred and fifty points allotted to this section, one hundred were designated for item I. Twenty-four activities were listed and up to three other activities, if set down by the scorer, were accepted. The intramural and interscholastic program dealt with any physical education activity organized and administered by the school, exclusive of the program in the regular operating hours of the school day. There were two schools whose total score for item I in this section exceeded fifty points. One of these schools obtained fifty-eight points and the other fifty-two points. The school next in rank obtained forty points. Two schools were awarded this score. Twelve schools received scores in the thirties. Fourteen schools had scores ranging from twenty to twenty-nine. Nineteen of the schools obtained scores ranging from ten to nineteen. Twenty-five schools had

scores of nine or less on this item.

Of the seventy-four schools from which returns were received, five were found to carry on interscholastic competition in more than six activities. Sixteen of the schools competed interscholastically in five or six activities. An additional twenty-two schools carried on three or four activities competitively with other schools. Another twenty-seven schools had an interscholastic program of one or two activities. Only four of the schools indicated no interscholastic program of any kind. Considering that many of the schools were in fairly remote areas, it was encouraging to note the extent to which interschool competition was attempted in at least one activity.

For interschool games it was found that eight schools used the school bus services. Fifteen of the schools chartered buses especially for such occasions. Twenty schools used automobile transportation organized by the school authorities. Eighteen schools used school-sanctioned automobile transportation arranged by the pupils or interested parents. Nine schools permitted the pupils to arrange their own transportation. As four schools did not conduct an interscholastic program, they were not concerned with transportation to other schools. Over one-third of all the pupils participating in interscholastic competition were not controlled or supervised by any school staff member during

transportation.

With respect to officiating in interscholastic games, eleven schools indicated that mutual agreement was effected for a qualified official. Eight schools indicated that one of the participating schools arranged for a qualified official. Thirty-five schools stated that one of the participating schools obtained the services of the best qualified person available. Fifteen schools stated that they accepted anyone who would offer his services as an official. Five schools failed to report on officiating.

Seven of the schools enrolled more than 80 per cent of all the pupils in their intramural program. Sixteen schools enrolled 60 to 80 per cent of all the school pupils. Thirteen schools were found to have 40 to 60 per cent of the pupils enrolled in the intramural program. Twenty schools had from 20 to 40 per cent of the pupils participating in the intramural program, whereas eight schools had fewer than 20 per cent of the pupils participating. Ten schools displayed no intramural program of any type.

The nature of the awards given for intramural competition varied greatly. Fifteen schools presented awards only to the winning team or group. Eleven schools rewarded each member of the winning group or team. Another eleven schools presented awards to individuals having the highest

rating in several activities. Only one school gave awards to individuals for participation in many activities, regardless of achievement. Five schools made automatic awards of crests or other recognition for participating in the intramural program. Thirty-one schools made no attempt at presenting awards for participating in the intramural program.

The intramural program was conducted for over eight months of the school year in fourteen schools. In nineteen schools the intramural program extended over a period ranging from six to eight months. Thirteen schools have a four to six months' program in this phase of physical education. Seven schools conducted their programs from two to four months. Another seven schools indicated programs of a shorter duration than two months. The remaining fourteen schools gave no indication as to the length of time spent on this aspect of the physical education program. The obvious supposition is that the time spent on intramural work is nil or negligible, particularly in view of the fact that ten of these schools previously indicated no intramural program in operation. Slightly more than 50 per cent of the schools had an operating intramural program for five months.

Intramural teams were shown to be selected in various ways. Seventeen of the schools selected their teams on the basis of achievement or motor efficiency tests. Four schools selected their teams on the basis of age, weight, height

classification such as is recommended in the McCloy system. Three schools selected their intramural teams on an alphabetical surname basis. Academic classes were used as groups or teams in nineteen schools. Four schools used a geographical or living area classification for the selection of teams. Twenty-seven schools indicated that they used none of these forms of classification in selecting their teams.

A large number of teachers devoted extra hours beyond the required teaching load in conducting and assisting with the intramural program. In eight schools the physical education teacher devoted more than eleven hours per week beyond the normal teaching load. In four schools the physical education teacher contributed eight to eleven hours for this program. Nine schools stated that their physical education teacher gave from five to eight extra hours for intramural work. Sixteen schools had physical education teachers working on the intramural program from two to five hours. The physical education teachers in twenty-four schools devoted two hours each week to intramural activities. Thirteen schools did not indicate any extra time devoted to an intramural athletic program.

In some instances special consideration was given to teachers who conducted physical education programs after school hours. In one school the teacher responsible for the intramural and interscholastic activities received additional

salary for his services. In seven schools the teaching load was lightened to compensate for the services performed. Four other schools eliminated some of the supervisory duties for such teachers. Five schools gave additional pay for coaching, supervision and conducting of certain games. Six schools permitted the physical education teachers some of the regular school time for travelling to and from centres where games were to be played. Fifty-one schools gave no consideration to the services given by the teacher in physical education.

With respect to coaching and supervision specifically, it was noted that twenty-six schools always had this part of the program administered by the physical education teachers. In twenty-eight schools the coaching and supervision was done by a staff member who worked in some other field of the curriculum. Five schools had the coaching and supervision conducted by a non-staff member. No school employed a student coach but five schools permitted the pupils to organize their own coaching. Ten schools showed no attempt at any specific coaching or supervising routine.

For section E as a whole, which comprises a possible one hundred and fifty points, no schools gained as many as one hundred points. Three schools had scores ranging from eighty to one hundred. Eleven schools had totals of sixty to eighty points on this section. Twenty-five schools scored

between forty and sixty. Twenty-two schools obtained twenty to forty points. Thirteen schools obtained scores below twenty points for this entire section. It is readily realized that scores exceeding one hundred points would represent a very extensive and complete intramural and interscholastic program. On the other hand scores below forty would indicate that this phase of the physical education program is not being given due consideration.

Section F of the survey dealt with the use of community resources. If a scorer felt that his school facilities and equipment were adequate for the conducting of a good physical education program he was asked not to check this section. As this section would not reveal the school situation, it was inserted merely for the gaining of information and no score value was assigned to it.

With respect to hockey, track and field, indoor winter sports, outside sports field and tumbling apparatus, five schools utilized the community resources for either four or all of the activities listed. Ten schools used three of the above stated facilities. Thirteen schools used two of these facilities. Twenty schools made use of one of these facilities.

Seven schools used the community resources with organized school groups during school hours. Four schools used the extra facilities during noon hours. Twenty-four

schools used the community facilities after school hours, before 6:00 p.m. Three schools made use of the community facilities during the evenings. Ten other schools were given the use of the community resources on special occasions. Approximately 70 per cent of all the schools used facilities not supplied by the school board.

Fifteen schools found the community leaders extremely co-operative. Seven schools found their community leaders willing to donate their time and services during slack periods. The community leaders in nineteen centres set aside their property at certain times for school use. Five school authorities found the community administrators reluctant to permit the pupils as a school group to use their facilities. No schools surveyed found the community directors positively unco-operative.

The school was given an opportunity in many instances to reciprocate. Community groups used the school property for various purposes. Five of the ways in which the school building was used by the community were: adult education, clubs, fairs and exhibits, games and dancing, and business meetings. Eight centres used the school for four or five of these functions. Nine communities carried out three of these types of activities in the school. Thirteen schools provided for two of these functions under community organization. Twelve schools were used for one of the above-

mentioned functions by the members of the community.

Many schools felt that they needed to use the community property even though such property was a moderate distance from the school building. Four schools used community facilities which were within two hundred yards of the school. Eleven schools had their pupils walk two hundred to four hundred and forty yards to the community centre. Another eleven schools were obliged to have their pupils go four hundred and forty to eight hundred and eighty yards for their physical education activities. Four schools employed community property one-half to one mile distant from the school. Two schools had their pupils travel more than one mile to use the community facilities.

A specific item was designed to determine why the community facilities were used instead of using school facilities alone. Three schools stated that the extra area available made possible a fuller program. Three schools revealed that the community made available equipment and supplies of better quality, or in greater quantity, than were available in the school. Twelve schools indicated that community facilities permitted activities which could not be conducted at the school. Another twelve schools simply stated that school facilities were inadequate and that consequently the additional facilities made available to them were necessary.

The final section of the questionnaire was set up

to assess the qualifications of the staff members teaching physical education. Courses and practical experience in physical education were specified. The first item was a check list set up for four or fewer teachers. Opposite the space provided for each teacher teaching physical education, there were placed five circles. The number of the circle when checked represented the number of courses taken in physical education by that teacher. If a school had more than four physical education teachers with qualifications in physical education, the scorer was permitted to add to the list. The scoring of this item was as follows: one point for each teacher for each course taken in physical education, to a maximum of five points. Only one school scored as high as twenty points on this item. Twenty points represented twenty physical education courses taken by all the physical education teachers at that school. The school having the next highest rating was thirteen. One school scored twelve and another scored eleven points. Three of the schools made scores of ten, eight and seven respectively. Three schools obtained a six point score and another three gained five points. Eleven schools scored four points; another eleven, three points. Nine of the schools scored two points, and eleven schools each had one physical education teacher with one course as background. The remaining nineteen schools showed no teacher with any university training in the field of physical education.

The second item in this section requested the number of teachers who held a physical education certificate. Three points were awarded for each teacher holding a certificate. Three schools had as many as four teachers with certificates. Two schools had three teachers each with such a certificate. Fifteen schools had two teachers each certificated in physical education. Twenty-four schools showed one teacher each holding a physical education certificate. The remaining thirty schools had no teacher on their staffs with a certificate in this field.

The next area of study dealt with the recency of training in the field of physical education. Any teacher having taken one or more courses in physical education since 1945 contributed two points to his school. Four schools indicated that four of their staff members had participated in such courses during that period. Two schools stated that three of their staff members had increased their physical education training since 1945. Thirteen schools specified that two members of each staff had taken such courses. Twenty-two additional schools indicated that one of their staff members received such training during that period. However, thirty-three schools showed that not one of the members of their staffs had improved his qualification in this field during the years 1945-1953.

The final item of the questionnaire, pertaining to

certification and training in physical education, was made up of four parts, each permitting one of five possible responses. Part 1 received values in multiples of five of the number checked, i.e., if circle three were checked a value of fifteen points would be awarded. Similarly part 2 was valued in multiples of three; parts 3 and 4 were valued in multiples of two. The maximum possible score then would be twenty-five plus fifteen plus ten plus ten or sixty points. Of the possible sixty points, the school with the greatest score on this item received eighteen points. One school received fifteen points. Three schools received eleven points and four other schools obtained ten points. Schools receiving fewer than ten points were as follows: two schools with nine points; another two schools with eight points; one school with seven points; four schools with six points; six schools with five points; eight schools with three points; and four schools with two points. This made up thirty-six schools that received some points on this item. There were another thirty-eight schools that made no score on this item. This indicated that the majority of schools have staffs poorly trained, or not trained, in any phase of physical education. This section also revealed that very few teachers have been availing themselves of the background courses for teaching in this field.

CHAPTER VI

RECOMMENDED STANDARDS IN PHYSICAL EDUCATION

There are a number of references available which are concerned with physical education programs, facilities and equipment and which state the necessity or importance for them in the school program. There are also available a small number of references dealing with recommended standards for facilities. It is these references that this chapter has dealt with as primary source material.

Blair[1] has made an extensive study of physical education facilities and has included standards or criteria generally recognized as valid by outstanding leaders in the field of physical education. While there is far from general agreement among the specialists regarding all the facilities, there is sufficient agreement to provide general standards. Those standards which follow, represent reasonable agreements amongst experts.

Blair states that the gymnasium should be fifty feet by eighty-five feet when fewer than five hundred pupils are enrolled. If there are more than five hundred pupils, two separate gymnasiums should be provided. If one gymnasium is to be used the size should depend on the enrollment as follows:

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[1] Herbert Blair, Physical Education Facilities for the Modern Junior and Senior High School. A.S. Barnes, New York, 1938, pp.12-53.

TABLE XVII

RECOMMENDED GYMNASIUM SIZES

Enrolled	Width	Length	Height
0 - 150	46'	80'	18'
151 - 500	50'	85'	20'
501 - 900	60'	90'	22'
901 - over	70'	100'	22'

La Porte[1] states that a practical minimum gymnasium floor area is 90' x 110' although some units could operate effectively with a somewhat smaller area. Ceiling height should be approximately twenty feet. Separate gymnasiums for girls and boys should be provided; if this is not possible the main floor area should be made divisible into two units.

The publication, A Guide for Planning Facilities for Athletics, Recreation, Physical and Health Education,[2] recommends floor areas of 76' x 96' with a ceiling height of 22'. This would provide two teaching stations with the use of a movable partition. Folding bleachers accommodating five

[1] Wm. Ralph La Porte, The Physical Education Curriculum, University of Southern California Press, Los Angeles, 1947, pp.43-44.

[2] National Facilities Conference Members, A Guide for Planning Facilities for Athletics, Recreation, Physical and Health Education, Athletic Institute, Chicago, Ill. 1947.

hundred spectators should be installed along one side. Detailed recommendations as to the floor markings, ventilation, lighting, electrical wiring, and plumbing arrangements are discussed in connection with the gymnasium.

Lamar[1] is in agreement with these standards and in addition suggests sky lighting if possible. Further he recommends that the area under the bleachers be utilized for locker and shower rooms.

Williams[2] is in agreement with these authors and states that separate gymnasiums should be provided when the enrollment exceeds eight hundred pupils. He states that canvas curtains can be used to make divisions if economy is essential.

Voltmer[3] supports the statements made and adds that light colour on walls and ceiling would be a desirable feature. He contends also that semi-direct artificial lighting is the most satisfactory when daylight cannot be utilized.

With respect to the program in physical education, La Porte[4] states that standards include objectives, teaching and motivating techniques, testing and measuring scales,

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[1]Emil Lamar, The Athletic Plant, Whittlesey House, New York, 1938, pp.107-109.

[2]J. F. Williams & C. L. Brownell, The Administration of Health and Physical Education, W. B. Saunders Co., Philadelphia and London, 1947, pp.260-261.

[3]E.F. Voltmer & A.A. Esslinger, The Administration of Physical Education, Appleton-Century-Crofts, New York, 1949, pp.162-174.

[4]La Porte, op. cit., pp.33-37.

provision for adjusted programs and adequate reference material. In addition a yearly program should be planned for each grade indicating all the important activities and the time to be devoted to each. Also, a detailed monthly, weekly and daily schedule should be prepared which is flexible as to indoor and outdoor participation and based as much as possible on seasonal activities. The school principal or superintendent should share actively in developing the course of study. La Porte's publication was based on nineteen years of research and is generally conceded to be one of the most authoritative references on standards in the physical education program.

The College Physical Education Association[1] made a number of suggestions with respect to standards in physical education. The greatest possible participation in activities was advocated. Continuance of outdoor activities during inclement weather was recommended.

Voltmer[2] suggested the following time allocation as illustrated in Table XVIII. These figures are close to those suggested by La Porte.

With respect to dressing rooms and shower facilities Blair[3] states that there should be one shower head for each

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[1]The College Physical Association, College Facilities for Physical Education, Health Education and Recreation, The College Physical Education Association, 1947, pp.2-96.

[2]Voltmer, op. cit., 124, 175.

[3]Blair, op. cit., p.52.

TABLE XVIII

PERCENTAGE OF TIME RECOMMENDED BY VOLTMER FOR DIFFERENT PHASES OF THE PHYSICAL EDUCATION PROGRAM

	Rhythmic	Team	Individual	Gymnastics	Home
Girls	30	30	30		10
Boys	10	30	30	20	10

four pupils in the largest class enrolled. The school should provide a clean towel for each person coming to the gymnasium. La Porte[1] subscribes to Blair's contentions in stating that dressing rooms, shower rooms, offices, health service areas and toilet facilities should be provided adjacent, or readily accessible to the gymnasium.

Williams[2] recommended individual baskets for pupil use. This is in agreement with La Porte's suggestion. Williams further recommended that locker and shower rooms should be separate but adjacent. With respect to showers he stated that slotted shower heads would be most serviceable.

Voltmer[3] continues by stating that the heating units in the locker rooms should be recessed. His figures for shower heads are as follows: one shower head for six boys and one for five girls based on the enrollment during the

[1] La Porte, op. cit., p.44.
[2] Williams, op. cit., pp.294, 295.
[3] Voltmer, op. cit., pp.167, 168.

peak load. These shower heads should be placed higher than the pupils' heads and should discharge diagonally downward.

With respect to outside areas and the facilities used out of doors La Porte[1] states that athletic fields should be equipped with areas suitable for all forms of field games such as football and the various kinds of court games such as tennis and handball. For instructional purposes as much space is required for a school of fifty to sixty students as for five hundred. Each school should have a battery of eight to ten units of courts for each of the individual or dual activities to insure satisfactory class instruction. A battery this size will accommodate thirty-five to forty students. Modification in teaching techniques and arrangement of classes into larger groups will reduce the need for facilities, but by doing this the effectiveness of the instruction is reduced. A fair estimate of minimum standards for ground area in the senior high school is from ten to fifteen acres. Heavy turf is the ideal surface for the large areas. For small areas, concrete asphalt or oil macadam can be used. Sand, shavings or earth used in jumping pits should be dug and loosened frequently. Play areas should be fenced off from the street and should be provided with attractive borders of shrubbery and shade trees.

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[1] La Porte, op. cit., pp.40, 41.

The College Physical Education Association[1] reports that areas and equipment for baseball, football, golf, lacrosse, soccer, tennis and track and field should be made available. In addition other field areas for class instruction and intramural sports such as volleyball and basketball should be provided. These facilities were felt essential to the basic operation of a satisfactory program. Lamar[2] examines extensively standards dealing with equipment such as scoreboards, markers, sound installations, night lighting, and bleachers. Voltmer[3] strongly recommends the buying of approved official equipment at all times as this type of equipment has been thoroughly tested and found to stand up well.

With respect to supplies La Porte[4] states that four to eight basketballs should be available for a class of forty pupils. Similarly an adequate number of footballs, soccer balls, softballs, volleyballs, hockey sticks, etc. should be supplied for the efficient operation of team games which have constituted a large part of the program. There is at present, increasing emphasis on activities with carry-over value. A progressive school then would have class sets of supplies for some of the following: archery, badminton, golf, handball, horseshoes, table tennis, tennis, shuffleboard, darts, paddle-

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[1] College Physical Education Association, op. cit., pp.2-96.
[2] Lamar, op. cit., pp.96-106.
[3] Voltmer, op. cit., p.150.
[4] La Porte, op. cit., p.40.

tennis and table and card games. Towels and swim suits should be furnished by the school board, and if possible gymnasium uniforms with proper laundering services should be provided on the same basis as textbooks are supplied for academic courses. Voltmer[1] concurs in this and has made several valuable suggestions regarding the care, maintenance and repair of equipment and supplies recommended.

Voltmer[2] states that the regular program develops basic fundamentals, but that interscholastic and particularly intramural activities offer opportunities for specializing as well as improving the fundamental skills, techniques and knowledge. Williams and Brownell[3] strongly recommend the operation of intramural and interscholastic programs because these possess inherent qualities which contribute to complete education.

La Porte[4] discusses interscholastic and intramural sports by stating that they should be made available to all the pupils. If required, the intramural program should take up part of the school day in addition to noon hours, recesses and after school periods. It is in the intramural program that pupils are afforded the opportunity to put into practice

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[1]Voltmer, op. cit., p.150.

[2]Voltmer, ibid., p.148.

[3]Williams and Brownell, op. cit., p.331.

[4]La Porte, op. cit., p.58.

the fundamentals and strategy learned during the class instruction period. The interschool athletic program requires careful administration and should be supervised by none but the best trained physical education teachers available. The coaches are expected to stress the fine ideals of cooperation, self-sacrifice, friendliness, and promote play according to the spirit of the rules. If these objectives of good sportsmanship are adhered to, the interschool program will likely achieve desirable results.

With respect to swimming pools, Williams and Brownell[1] state that wherever possible a pool should be built since swimming allows for maximum functioning of large muscle groups without danger of strain. The College Physical Education Association[2] records a detailed list of materials and equipment used with the pool together with measurements of the recommended size of the pool. Lamar[3] concurs in the measurements recommended. The publication, A Guide for Planning Facilities for Athletics, Recreation, Physical and Health Education,[4] strongly supports the operation of a swimming program as the overall program would include swimming instruction, life saving, health education, corrective physical education, competitive swimming and diving,

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[1] Williams and Brownell, op. cit., p.287.

[2] College Physical Education Association, op. cit., pp.2-96.

[3] Lamar, op. cit., p.106.

[4] National Facilities Conference Members, A Guide for Planning Facilities for Athletics, Recreation, Physical and Health Education, Athletic Institute, Chicago, Ill. 1947.

water games and contests, water pageantry, synchronized swimming and social or recreational swimming. Recommended dimensions of the pool are also recorded together with instructions on the maintenance of swimming pools.

The Iowa Program of Physical Education for Boys[1] sets down some factors recommended for the conducting of a swimming program. Included in the recommendations were such factors as temperature and depth of water, what flotation aids were suitable and the types of life saving equipment to be used and where this equipment should be located.

La Porte[2] states that swimming pools should be provided wherever possible since swimming has been evaluated as the most significant all-round contributing activity in the entire list. In most climates the closed pool is desirable to facilitate class instruction during the winter months. La Porte[3] states recommended sizes and depths of swimming pools. These recommendations approximate the recommended standards stated by the authors previously mentioned.

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[1] Iowa Program of Physical Education for Boys, Department of Physical Instruction, Des Moines, Iowa, State of Iowa, pp.211, 212.

[2] La Porte, op. cit., p.45.

[3] La Porte, ibid., p.45.

CHAPTER VII

CONCLUSIONS AND RECOMMENDATIONS

Conclusions

From the results of the questionnaire many inferences and conclusions can be reached. The general situation with respect to physical education in Alberta high schools appears poor indeed. Later as the Alberta picture is compared with the recommended standards it becomes obvious how deficient Alberta is in many respects. More specifically a number of conclusions can be made from the analysis made in Chapter V.

Twenty-three schools surveyed had fewer than 40 per cent of the pupils participating in regular physical education classes. This would indicate that either the school administrators are not generally aware of the need in the school program for physical education, or that lack of facilities or equipment prohibits the conducting of these regular classes.

Twenty schools indicated that their physical education program did not adhere to the Physical Education I or Physical Education II outlines. These outlines are made available for all administrators. It may be assumed, then, that many teachers do not feel qualified to teach these

subjects. Also, it may be, that these subjects are considered less important than are other phases of the curriculum.

Thirty-three schools conducted no tumbling or apparatus work in their program. Another twenty-two schools carried on these activities for only a few days during the year. This would seem to indicate that equipment is lacking, since only a small amount of space would be required for tumbling or apparatus work. In Alberta, where the winter weather is severe and pupils are often restricted to indoor classes, one would expect these activities to be carried on to a greater degree.

The extent to which individual and dual activities (e.g. badminton, golf, skating etc.) are carried out has been shown to be quite restricted. Many authorities consider these activities to be basic to the program, as the skills acquired in these activities have a carry-over value into adult life. Such leisure-time activities have been given added emphasis in recent years. Forty-one of the schools surveyed devoted two weeks or less to these individual and dual activities. In an approved program these activities make up one-fourth of the entire course. Since the majority of schools make little or no attempt to conduct these activities, it might be concluded that either teachers are unaware of the important role these carry-over

activities hold or school boards do not make available satisfactory facilities and equipment for such activities.

With respect to planning the physical education program, it appears that most administrators are not aware of the basic considerations entailed in setting up the overall program. Many schools neglected this phase of preparation although they may have received a good rating on most other items. The teachers and administrators seem to be genuinely attempting a good physical education program but appear to lack the knowledge of the basic essentials for the planning of a comprehensive program.

Most administrators seem to feel that the regular academic class period length is suitable for physical education classes. Eighty-one per cent of the schools surveyed had physical education periods of forty or fewer minutes per period. It appears that little attempt is being made to alter certain periods of the day to permit a longer physical education class period. Very few schools are using the double period for the physical education classes. Longer periods are required for physical education classes to permit dressing and showering following the activity sessions. Far too often pupils rush into the classroom, following physical education, perspiring and with dirty hands. Recommended health rules are too often overlooked in the rush of going to the next class.

The authorities in the field of physical education feel that all or almost all of the class period should be devoted to teaching and practicing the basic fundamentals. Each activity under study should be broken down into basic parts and these parts should be mastered as well as possible through example, correction and practice. It is obvious that the regular teacher has not been aware of this view. He appears to feel that what matters most is participation or "playing the game."

Very few schools supplied costumes for pupils taking physical education. A great number of classrooms have been operating much less effectively than should be the case. Without the proper costume, a decided restriction in vigorous participation results. Winter sports equipment was found to be in short supply. Many pupils missed the opportunity of participating in skiing, skating, and hockey because they did not own the required equipment. A certain amount of skiing and hockey equipment should be made available for pupil use in all high schools.

Most schools had fewer than one book or periodical for each twenty pupils enrolled. Books and periodicals in this field are readily available. Fiction writing relating to physical education holds high interest for most pupils. The schools are missing an opportunity to capitalize on interests in motivating the pupils to gain information and

extend their background in literature and science as well as physical education. Many schools, too, have not been availing themselves of useful and free teaching aids. These aids would enrich the physical education program and would add to the proficiency of the teacher in the field of physical education.

Approximately one half of the schools had only one physical education teaching station or activity area indoors. During the severe winter weather and rainy periods only one class in physical education could be conducted at one time. If the activity was not of a co-education nature, either the boys or the girls would be excluded from participation during that time. This would mean a decrease in the already small number of physical education periods in which the boys and girls have been participating.

In many schools the intramural and interscholastic programs were active and well conducted. The extent to which these programs were carried out depended on the interest, enthusiasm and sacrifice of time by the school staff members. This sacrifice was made in the belief that this part of the school's total program for the pupils contributed toward developing skills, proper attitudes, and an esprit de corps. Further, the intramural and interscholastic activities brought the pupils together in a freer atmosphere than the normal class situation. During these

activities desirable forms of social living were encouraged and undesirable forms of social activity discouraged. This part of the program was an extension and supplement to the school-day classes. Much more could be done in this department by most schools. More of the staff could be encouraged to participate in this valuable part of the program. More activities, then, could be included in the schools interscholastic and intramural programs.

Only a few schools gave any consideration to the services given by the physical education teacher. Some teachers averaged two and a half hours per school day in conducting intramural or interscholastic programs. It is readily realized that the physical education teacher often has felt morally obliged to donate his services outside of the normal teaching day. He has given of his time freely and often generously. Too often his sacrifice in time and energy has been overlooked or merely accepted. It would appear that some tangible consideration might be given to the physical education teacher. Then he would know that his services were being recognized and appreciated.

The majority of the teachers handling physical education indicated that they had received no training in physical education. Of those who have received some training almost all had only one or two courses as their background. Over 40 per cent of all the schools have no staff

member with a junior certificate in physical education. A subject which is considered so basic as to be made compulsory would seem to warrant trained teachers. However, as has been revealed by this study the amount of training taken by those teachers administering physical education credit is extremely limited.

Fewer than 20 per cent of all the schools surveyed employed any system of classifying the pupils into groups for equality of athletic competition or efficient instruction. Academic classes used as physical education classes minimized administrative planning. However in physical education it is considered important for the sake of safety as well as harmony not to expect a small person to compete with a large, muscular person. In the body contact activities particularly, physiological age should be an important aspect of classification.

Only one school surveyed had a swimming pool. Swimming is considered by most authorities as the most valuable single activity in the program. Some authorities recommend that as much as 25 per cent of the physical education curriculum be devoted to water activities. The summer season in Alberta is short. The swimming beaches suitable for learning to swim safely are few. Because of these factors, as well as others, a great many pupils complete school unable to swim. On some occasion a pupil's life or the life of another person might easily depend on this ability to swim

which should have been learned at school.

Indoor facilities generally were found to be most inadequate. In Alberta, a major portion of the activities has always been planned for indoor areas. In these areas, the program can be only as good as the facilities which permit the conducting of the activities. The majority of schools could only conduct a very restricted group of activities as they indicated having fewer than three of the nineteen basic facilities recommended for the proper administration of a physical education curriculum.

Generally, the outdoor playing area was quite adequate as to area for the number of pupils enrolled in the school. In Alberta, we have been fortunate in having plenty of outdoor space. School boards have shown good judgment in allotting liberal areas for the playing of games and as settings for the school buildings. It is hoped that with increased building programs throughout the Province the provision of adequate playing space for pupils will not be overlooked.

Softball, as part of the physical education program, has been well conducted on the whole. It has been encouraging to note that most schools have adequate softball supplies to equip more than one team. Softball is an activity which can be conducted either in the fall or in the spring. A fairly large number of pupils can be accommodated in the

average school grounds. Softball can be a valuable co-educational team activity. A good softball program can thus perhaps offset in part the absence of or deficiencies in other parts of the program.

It was most encouraging to note the willingness of the community leaders to offer their facilities to the school pupils. Since approximately 70 per cent of all the schools employed the community resources it can readily be noted that the community played an important role in the promotion of the physical education program. However, most of the Alberta schools used the community resources because the schools themselves were deficient in equipment or facilities.

These have been the most readily observable conclusions based on the findings recorded in Chapter V. Many other deficiencies and inadequacies can be noted as well. The conclusions listed relate to the most essential aspects of a satisfactory physical education program.

In comparing the Alberta situation with standards recommended in Chapter VI, it is noted that detailed requirements of the conditions for swimming are listed whereas in the schools surveyed, only one school had a swimming pool of any description. Authorities assumed that most large schools had swimming pools and recommendations were made regarding their size, shape and use. It can be readily

noted how deficient Alberta is with respect to swimming pool facilities.

Most authorities agreed that two separate gymnasiums should be made available, one equipped for boys and the other for girls. In the schools surveyed no schools had two separate gymnasiums although one school had a partition unit which would divide the main gymnasium into two separate teaching stations. The need for separate areas for boys'and girls' physical education classes seems to be somewhat overlooked in Alberta.

Very few schools had a physical director's office and where such existed none measured up to the requirements recommended by Blair[1] as reported in Chapter VI. No school was even nearly equipped with the suggested materials recommended. Blair stated that a director's office should be supplied for a school having only one or possibly two teachers instructing in physical education.

Several schools surveyed supplied shower facilities for the pupils but the dressing room sizes were smaller than were recommended. The policy of providing a clean towel for each pupil in the gymnasium was not carried out in the schools surveyed. Many of the schools had a health service or examination room but were not equipped with apparatus rooms, rest rooms or corrective rooms as recommended in

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[1]Blair, op. cit., pp.70-72.

Chapter VI.

Only five of the schools had gymnasium floor areas nearing the minimum as suggested by La Porte.[1] Almost half the schools reached the minimum height standard of eighteen feet in their gymnasiums. With respect to supplies used in the gymnasiums, Alberta schools fell far short of the minimum requirements listed by La Porte.

Only three schools in the province adhered to the minimum number of periods per week in physical education. Only one of these schools met the further requirement of having period lengths ranging from forty to sixty minutes. These two requirements could be met regardless of facilities if the school administrators knew what the requirements were and planned their programs accordingly.

Perhaps the greatest variance from the recommended standards was with respect to the program planning. Adequate program planning requires only knowledge of what is to be done and setting down the information in usable form. Very few teachers are aware of the teaching and motivational techniques peculiar to physical education. Testing and measuring scales for different activities were not made available to the teachers. Reference material was scanty. A flexible monthly, weekly and daily schedule was seldom if ever employed. Most teachers were not aware of the time

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[1] La Porte, op. cit., p.43.

allocation for each of the activities. Further, the sequence in which to teach the various fundamentals of an activity was unknown to most teachers. Teachers in physical education, too, were generally uncertain as to the amount of stress which should be devoted to each of the fundamentals of an activity. For these and other similar reasons the author feels that teachers handling physical education in Alberta have been producing far from the best results.

These have been some of the comparisons between the physical education situation in Alberta and the standards recommended by the recognized authorities in this field. Many other comparisons could be made but those set down will serve to illustrate the low standard under which the Alberta schools are at present operating. Much could be done to improve the status of physical education. It is hoped that some steps will be taken so that physical education will attain its rightful place as an important and necessary part of the core of the curriculum.

Recommendations

Certain recommendations follow in the light of the information which has been revealed. Those which are considered most significant will be listed. It is with the hope that serious thought and perhaps concrete action may be taken in this matter, that the following recommendations

are made.

1. It is suggested that supplementary literature be made available to all school administrators setting down an approved program, listing alternate activities, information and suggestions as to the planning of the program, and a few flexible example programs to aid each school in planning and conducting a better physical education program.

2. It is recommended that a higher standard be required by teachers administering physical education. If additional training at the university level is not feasible, carefully standardized and planned in-service training curriculums could be set up.

3. School administrators should have more teaching reference material available and periodic meetings should be carried out to ensure a complete co-ordinated curriculum in the school.

4. It is recommended that interested school administrators reveal the recommended standards for physical education facilities to their respective school boards in the hope that improvement in the facilities may result.

5. It is also recommended that more supervisors trained and experienced in physical education be made available to assist high school administrators in improving or planning their programs. These supervisors in physical education could also serve to conduct sample classes for schools which

carry on an in-service training program.

6. It is recommended that continued surveys be made in this field to assess any progress which may be made. In this regard it is hoped that the author's score card developed for this study will be improved and revised and put into use in a future survey. It is further hoped that a standard score card may be evolved to fit the Canadian situation.

7. It is finally recommended that part of this study be put into published form to stimulate thought and action with regard to physical education and perhaps to a small degree assist in the upgrading of the physical education curriculum as a whole.

BIBLIOGRAPHY

BIBLIOGRAPHY

Barker, William, Physical Education for Schools and Colleges, Edmonton, Institute of Applied Art, 1937.

Blair, Herbert F., Physical Education Facilities for the Modern Junior and Senior High Schools, New York, A. S. Barnes, 1938.

Bovard, John F., Tests and Measurements in Physical Education, Philadelphia, W. B. Saunders Co., 1949.

Bulletin 3, Program of Studies for the High School, Edmonton, King's Printer, 1946.

Bulletin 4, Program of Studies Elementary School Physical Education, Edmonton, King's Printer, 1951.

Brace, David K., Health and Physical Education for Junior and Senior High Schools, New York, A. S. Barnes, 1948.

Clarke, Henry H., The Application of Measurement to Health and Physical Education, New York, Prentice-Hall, 1950.

College Physical Education Association, College Facilities for Physical Education, Health Education and Recreation, Jackson's Mill, W. Va., 1946.

Collins, Laurentine B., Physical Education in the Secondary School, New York, Committee on Workshops, Progressive Education Association, 1940.

Cozens, Frederick W., Physical Education Achievement Scales for Boys in Secondary Schools, New York, A.S. Barnes, 1936.

Davis, Elwood C., Methods and Techniques Used in Surveying Health and Physical Education in City Schools, New York, Columbia University, 1932.

Dewey, John, Democracy and Education, New York, The Macmillan Company, 1929.

Eriksson, Arthur W., "A Survey of Physical Education and Health in Representative One-room Schools of Alberta," (Unpublished Master's thesis, Department of Physical Education, University of Washington, 1943.)

Guerrara, J. A., A Survey of Physical Education Facilities, Scholastic Coach, January, 1953.

Houston, Ruth E., Modern Trends in Physical Education Facilities for College Women, New York, A.S. Barnes, 1939.

Hughes, W. L., Administration of Health and Physical Education in Colleges, New York, A.S. Barnes, 1935.

Hughes, Richard L., "A Survey of the Physical Education Programs in the Secondary Schools of Greater Victoria, British Columbia Area." (Unpublished Master's Thesis, Department of Physical Education, University of Washington, 1946.)

Iowa, The Iowa Program of Physical Education for Boys, Secondary School, Des Moines, 1945.

Jonason, C. J., "A Survey of School Ground, School Plant and Teacherage Conditions in Eighty Schools Situated in Central and Northern Alberta." (Unpublished Master's Thesis, Department of Arts and Science, University of Alberta, 1940.)

Lamar, Emil, The Athletic Plant, New York, Whittlesey House, 1938.

La Porte, William R., The Physical Education Curriculum, Los Angeles, The University of Southern California Press, 1947.

Larson, Leonard A. and Yocom, Rachael D., Measurement and Evaluation in Physical, Health and Recreation Education, St. Louis, Mosby, 1951.

McCloy, Charles H., Tests and Measurements in Health and Physical Education, New York, Appleton-Century-Crofts, 1954.

McLachlin, Herbert J., "A Survey of the Physical Education Curriculums, Facilities and Administrative Organizations in the Senior High Schools in the Cities of the Province of Alberta, Canada." (Unpublished Master's Thesis, Department of Physical Education, University of Washington, 1952.)

Nash, Jay B., The Administration of Physical Education, New York, A.S. Barnes, 1931.

Nash, Jay B., Interpretations of Physical Education, New York, A. S. Barnes, 1935.

Nixon, E.W., and Cozens, F.W., An Introduction to Physical Education, Philadelphia and London, W.B. Saunders Company, 1947.

Oberteuffer, D., Physical Education, New York, Harper and Brothers, 1951.

Panton, James H., "A Survey of Men's Intramural Programs in the Secondary Schools in Manitoba, Saskatchewan, Alberta and British Columbia and a Suggested Plan for Organization in Secondary Schools." (Unpublished Master's Thesis, Department of Physical Education, University of Washington, 1948.)

Participants in the National Facilities Conference, A Guide for Planning Facilities for Athletics, Recreation, Physical and Health Education, Chicago, The Athletic Institute Inc., 1947.

Voltmer, E.F., and Esslinger, A.A., Organization and Administration of Physical Education, New York, Appleton-Century-Crofts, 1949.

Watkin, J.F., "Extra Curricular Activities in Alberta High Schools." (Unpublished Master's Thesis, Department of Arts and Science, University of Alberta, 1938.)

Williams, J.F., Principles of Physical Education, Philadelphia and London, W.B. Saunders Company, 1942.

Williams, J.F. and Brownell, C.L., The Administration of Health and Physical Education, Philadelphia, W.B. Saunders Company, 1946.

APPENDIX A

11607 - 76th Avenue,
Edmonton, Alberta,
April 10th 1953.

Dear Sir:

In co-operation with the staff of the Department of Education, University of Alberta, I am conducting a survey of the overall physical education program in the Alberta high schools.

To determine existing conditions I am sending out the enclosed questionnaire. It would be of great assistance if you could find time to complete and return the questionnaire to the above address before May 15th.

Exact data is requested but where this is impossible a fairly accurate estimate would be very much appreciated. All information will be treated confidentially.

The purpose of this study is to determine the status of Physical Education in Alberta high schools. From this information certain suggestions and recommendations will be forthcoming. These suggestions might be of valuable assistance to teachers, administrators, supervisors and the Department of Education.

Respectfully yours,

K. M. Grierson

Student, Faculty of Education,
University of Alberta.

ADMINISTRATIVE DIRECTIONS FOR COMPLETION OF THE SENIOR HIGH SCHOOL PHYSICAL EDUCATION SURVEY

GENERAL

This survey is to be completed by a staff member in your school who is familiar with the overall physical education arrangements of your school. In some cases this will be the principal of your school.

An absolutely objective and impartial scoring is necessary in order to gain valid results.

On the completion of scoring please return to

K. M. Grierson,
11607 - 76th Avenue,
Edmonton, Alberta.

A stamped, self-addressed envelope is enclosed for your convenience. Returns should be made by May 15th 1953.

ADMINISTRATIVE DATA

Date .....

Name of School ..... Address .....

Name of Division .....

Name of Superintendent .....

Name of Principal .....

This survey scored by .....

Status on the staff of scorer .....

Grades taught in this school .....

Pupils enrolled: boys ..... girls .....

Does the school have dormitory facilities (check) yes ....
no .....

Do the majority of pupils come to school by bus?
(check) yes ....
no .....

SCORING DIRECTIONS.

1. Read the entire blank to become familiar with the range of material listed.

2. Examine the numbered five statements under each heading. If statement 1 applies to your school place a check mark in circle number 1 directly to the right of the series of statements relating to the heading, etc.

EXAMPLE

With respect to the outside construction material used in your school.

1. Entirely brick
2. Brick and stucco
3. Cement
4. Frame
5. Other material

1 2 3 4 5

○ ○ ○ ✓ ○

If your school is of frame construction you would check circle number four as above.

Under the series of five statements or remarks will be left a space for comment or clarification. In some cases the five statements may not adequately describe your situation. Please feel free to make any additional comments which you deem necessary.

VARIOUS AREAS OF THE SURVEY

A. Program of Activities

B. Equipment and Supplies

C. Outdoor Areas and Facilities

D. Indoor Areas and Facilities

E. Intramural and Interscholastic Programs

F. Utilization of Community Resources

G. Certification and Training of Teachers Teaching Physical Education

A. PROGRAM OF ACTIVITIES

I. Your school program includes some or all of these listed activities. Please indicate activity conducted by a check mark opposite the activity.

Dancing - Folk and Square
Social

Team Sports - Basketball (boys)
Basketball (girls)
Fieldball (girls)
Hockey (boys)
Soccer
Softball
Speedball
Touch football (boys)
Volleyball (boys)
Volleyball (girls)

Stunts and Tumbling

Apparatus (boys)

Individual and
Dual Sports - Archery
Badminton
Golf
Handball (boys)
Skating
Tennis
Track and field

Additional Sports and Recreational Activities
Baseball (boys)
Bordon ball (boys)
Broom ball
Hiking and Camp Craft
Horseshoes
Skiing
Swimming
Table Tennis
Wrestling (boys)

Please list any additional activities conducted but not included in the above list

II Of all the high school pupils in your school the percentage of pupils who participate in regularly scheduled physical education classes
1. is between 80% and 100%.
2. is between 60% and 80%.
3. is between 40% and 60%.
4. is between 20% and 40%.
5. falls below 20%.

1 2 3 4 5
○ ○ ○ ○ ○

III The courses offered at your school which result in credits for the pupils include
1. both Phys.Ed.II and Phys.Ed.I.
2. Physical Education I.
3. a Physical Education program not adhering to Phys.Ed.I or Phys.Ed. II outline, but felt to be adequate.
4. a Phys.Ed. program set up by the principal and teachers.
5. a Phys.Ed. program set up by each individual Phys.Ed. instructor.

1 2 3 4 5
○ ○ ○ ○ ○

IV The average number of pupils in the physical education class is
1. under 20 pupils per class.
2. 20 - 25 pupils per class.
3. 25 - 30 pupils per class.
4. 30 - 35 pupils per class.
5. over 35 pupils per class.

1 2 3 4 5
○ ○ ○ ○ ○

V Of the total year's program, folk, square and social dancing are taught
1. six weeks.
2. five weeks.
3. four weeks.
4. three weeks.
5. two weeks.

1 2 3 4 5
○ ○ ○ ○ ○

Please state time allotted to each phase of dancing.

VI The time allotted to Team Sports (refer to Question I) during the year is (check closest figure)

1. 14 weeks.
2. 12 weeks.
3. 10 weeks.
4. 8 weeks.
5. 6 weeks.

1 2 3 4 5

VII Stunts and tumbling during the year take up (check closest figure)

1. 4 weeks in the program.
2. 3 weeks in the program.
3. 2 weeks in the program.
4. 1 week in the program.
5. no time in the program.

1 2 3 4 5

VIII Apparatus work (boys) in any one year receives

1. 4 weeks in the program.
2. 3 weeks in the program.
3. 2 weeks in the program.
4. 1 week in the program.
5. no time in the program.

1 2 3 4 5

IX Individual and Dual Sports (refer to Question I) receive (check closest figure)

1. 7 weeks of the year's program.
2. 5 weeks of the year's program.
3. 3 weeks of the year's program.
4. 2 weeks of the year's program.
5. 1 week of the year's program.

1 2 3 4 5

X Additional Sports and Recreation (refer to Question I) receive of the year's program (check closest figure)

1. 10 weeks.
2. 8 weeks.
3. 5 weeks.
4. 3 weeks.
5. 1 week.

1 2 3 4 5

Please list any activities you conduct not in the check list and state time allotted to each.

XI The entire physical education program is based on (a) detailed year's outline, (b) 6 weeks in advance outline (alternative outline for inclement weather), (c) daily lesson plan, (d) year's outline filed in principal's office, (e) entire program set up in co-operation with others and based on authoritative advice.
In your school you observe
1. four or five of the above mentioned plans.
2. three of the plans.
3. two of the plans.
4. one of the above mentioned plans.
5. none of the plans mentioned above.

1 2 3 4 5
○ ○ ○ ○ ○

XII During the regular program the average number of physical education periods per week are (check closest figure)
1. 5 periods per week.
2. 4 periods per week.
3. 3 periods per week.
4. 2 periods per week.
5. 1 period per week.

1 2 3 4 5
○ ○ ○ ○ ○

XIII The average length of the physical education period in your school is
1. over 50 minutes.
2. 40 - 50 minutes.
3. 30 - 40 minutes.
4. 20 - 30 minutes.
5. less than 20 minutes.

1 2 3 4 5
○ ○ ○ ○ ○

XIV The main outdoor area used for physical education <u>class periods</u> is
1. within 40 yards of the main school building.
2. within 80 yards of the main school building.
3. within 120 yards of the main school building.
4. within 160 yards of the main school building.
5. within 200 yards of the main school building.

1 2 3 4 5
○ ○ ○ ○ ○

XV In each physical education class period the actual teaching of fundamental skills, techniques and drills as a contrast to playing the game; the teaching period takes up

1. more than 70% of the period.
2. 50% - 70% of the period.
3. 30% - 50% of the period.
4. 10% - 30% of the period.
5. less than 10% of the period.

1 2 3 4 5

XVI Co-educational activities during the year take up

1. 6 weeks of the program.
2. 4 weeks of the program.
3. 3 weeks of the program.
4. 2 weeks of the program.
5. 1 week of the program.

1 2 3 4 5

XVII In physical education the division into classes is determined by

1. a classification based on knowledge, experience and ability.
2. an approved classification, e.g. the McCloy system.
3. an age and/or weight distinction.
4. the academic class in which pupils are situated (or divisions on purely alphabetical basis.)
5. no planned classification.

1 2 3 4 5

XVIII The rating of a pupil in physical education is determined by

1. a combination of knowledge tests, skill improvement and attitude.
2. written tests and observations of skill improvement.
3. improvement shown by standardized tests.
4. teacher's opinion on observations during activities.
5. formal tests (written) relating to activities taken.

1 2 3 4 5

XIX The physical education program is regularly supplemented by

1. motion picture films relating to current activity.
2. film strips relating to current activity.
3. film or film strip on any activities available.
4. study and discussion of material in physical education periodicals.
5. none of these.

1 2 3 4 5
○ ○ ○ ○ ○

B. EQUIPMENT AND SUPPLIES.

I Please indicate the equipment at your school by placing a check mark after each item if your school has such equipment.

4 basketballs
4 footballs
4 soccer balls
4 volleyballs
2 pr. jumping standards
3 tennis nets
4 tumbling mats (5' x 10')
2 badminton nets
8 badminton rackets with presses
6 tennis rackets and presses
catcher's mask and chest protector
1 set of goal pads
1 stopwatch
1 measuring tape 50' long.
1 record player
set of records for rhythms
8 softballs
12 softball bats
springboard
parallel bars
box horse
high bar
rings
climbing rope
2 baseballs
1 baseball bat
discus and shot put

Please list any equipment not included in the above check list.

II With respect to (a) clothing worn by the pupils participating, i.e. shorts, shirt and running shoes, (b) showers participated in after each period, (c) towels supplied or service arranged for, (d) full length locker per pupil during Phys.Ed. period, (e) well ventilated area for storage of Phys.Ed. clothing after use, your school fulfills

1. all of the above points.
2. four of the above points.
3. three of the above points.
4. two or one of the above points.
5. none of the above points.

1 2 3 4 5

III With respect to outdoor winter activities, your school supplies the following equipment (a) skis, (b) skates, (c) set of hockey equipment for an entire team, (d) complete goaltender's costume (except skates), (e) hockey sticks for a complete team

1. five or four of the above mentioned items.
2. three of the above mentioned items.
3. two of the items mentioned.
4. one of the above mentioned items.
5. none of the above mentioned items.

1 2 3 4 5

IV With respect to costume for team use (a) running shoes and basketball equipment for a complete team, (b) football gear for a whole team, (c) full equipment for some other team of more than 6 players, (d) sweaters for an entire team, (e) running shoes, shorts, shirts or other separate equipment, your school supplies for school use

1. five or four of these items.
2. three of these items.
3. two of these items.
4. one of these items.
5. none of these items.

1 2 3 4 5

V In your school you have enough equipment for softball including balls, bats, gloves etc. to outfit

1. more than four complete teams.
2. three or four complete teams.
3. two complete teams.
4. one complete team.
5. some miscellaneous equipment.

1 2 3 4 5

VI With respect to your physical education library you have

1. one book or periodical (or more) per pupil, i.e. if 300 pupils attend the school 300 books or periodicals relating to physical education would be in the library
2. one book or periodical per 2 - 5 pupils.
3. one book or periodical per 6 - 10 pupils.
4. one book or periodical per 10 - 20 pupils.
5. one book or periodical for more than 20 pupils.

1 2 3 4 5
○ ○ ○ ○ ○

C. OUTDOOR AREAS AND FACILITIES

(Facilities to be defined as the stationary or fixed items the school has obtained.)

I The outdoor playing surface of your school has an area of

1. fifteen acres or more.
2. ten to fifteen acres.
3. five to ten acres.
4. two to five acres.
5. less than two acres.

1 2 3 4 5
○ ○ ○ ○ ○

II The major surface of the outside field area used for physical education is/has

1. turf in excellent condition.
2. turf in poor condition.
3. earth, levelled but with little or no grass.
4. fair field with little or no upkeep.
5. no regularly maintained field.

1 2 3 4 5
○ ○ ○ ○ ○

III Around your field area for the purpose of appearance and protection you have

1. a link fence suitably landscaped.
2. a hedge extending over most of the perimeter.
3. a line of trees.
4. shrubs along the property line.
5. no particular plantings or fence.

1 2 3 4 5
○ ○ ○ ○ ○

IV With respect to jumping pits as used in track and field events you have

1. two or more pits (one for high and one for broad) with shavings or sawdust for high and sand for broad.
2. two or more pits with sand or loosened earth.
3. one pit with shavings or sawdust.
4. one pit with sand or loosened earth.
5. one pit with unsatisfactory medium on which to alight.

1 2 3 4 5

V In the outdoor field area, as regards fixtures for (a) handball or tennis (i.e. backboard), (b) basketball (i.e. baskets), (c) soccer, (d) volleyball, (e) softball backstops, your school has fixtures which will permit

1. all five activities.
2. four activities.
3. three activities.
4. two activities.
5. one activity.

1 2 3 4 5

VI In the outdoor area the following surfaces and facilities might be found (a) baseball diamond, (b) football field (turf), (c) running track, (d) spectator stands (permanent), (e) a paved all-weather surface. In your school area you have facilities for

1. four or five of the activities.
2. three of the activities.
3. two of the activities.
4. one of the activities.
5. none of the activities listed.

1 2 3 4 5

D. INDOOR AREAS AND FACILITIES

I The indoor area used for physical education includes

1. gymnasium and swimming pool.
2. gymnasium only.
3. gymnasium-auditorium.
4. a large hall.
5. a large room turned over primarily for physical education purposes.

1 2 3 4 5

II The following facilities might be available in some schools. Please check the items that you have, or services you supply.

1. a boys' gymnasium and a girls' gymnasium.
2. a physical instructor's office.
3. an apparatus room.
4. a storage room for physical education equipment.
5. a locker or basket for each pupil.
6. shower facilities.
7. a footbath (antiseptically treated).
8. storage facilities for pupils' equipment other than private lockers.
9. facilities for changing towels.
10. fixtures for volleyball net.
11. fixtures for badminton net.
12. basketball backboards.
13. restroom with one or more cots.
14. sanitary facilities including toilets, basins, soap.
15. health service room.
16. bleacher accommodations in gymnasium.
17. recessed adequate non-glare lighting.
18. supply room.
19. room for corrective work in Phys. Ed.

III The main floor surface used in physical education has an approximate area of

1. more than 8,000 sq. ft.
2. 5,000 - 8,000 sq. ft.
3. 2,500 - 5,000 sq. ft.
4. 1,000 - 2,500 sq. ft.
5. less than 1,000 sq. ft.

1 2 3 4 5
○ ○ ○ ○ ○

IV The main indoor playing area has a ceiling height of

1. more than 25 feet.
2. 22 - 25 feet.
3. 18 - 22 feet.
4. 12 - 18 feet.
5. less than 12 feet.

1 2 3 4 5
○ ○ ○ ○ ○

V With reference to the activity list in Section A, Question I, your school at one time can carry on the following number of indoor activities

1. more than four activities.
2. four activities.
3. three activities.
4. two activities.
5. one activity.

1 2 3 4 5
○ ○ ○ ○ ○

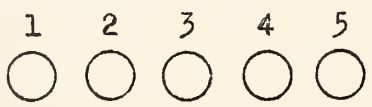
E. INTRAMURAL AND INTERSCHOLASTIC PROGRAM

I Please check the activities in which your school conducts an intramural or interscholastic program.

ACTIVITY	INTRAMURAL	INTERSCHOLASTIC
basketball (boys)		
basketball (girls)		
hockey		
soccer		
softball		
volleyball (boys)		
volleyball (girls)		
stunts and tumbling		
apparatus work		
archery		
badminton		
golf		
handball		
skating		
tennis		
track and field		
rugby football		
skiing		
swimming		
table-tennis		
baseball		
curling		
wrestling		
bordon ball		
other activity not listed		

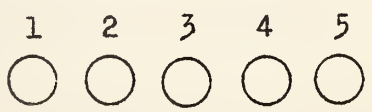
II Your school competes against other schools in

1. more than 6 activities.
2. five or six activities.
3. three or four activities.
4. one or two activities.
5. no activity.



III For interschool games transportation is generally by

1. school operated buses.
2. bus chartered by the school.
3. automobile transportation organized by the school.
4. automobile transportation organized by pupils or parents.
5. pupils arranging own transportation.



IV For interschool games the officiating is usually done by

1. a qualified mutually agreed to official.
2. a qualified official.
3. best available qualified person.
4. anyone who can be obtained to offer his services.
5. student referee.

1 2 3 4 5

V The number of pupils participating in the intramural program would approximate

1. more than 80% of the school enrolment.
2. 60% - 80% of the enrolment.
3. 40% - 60% of the enrolment.
4. 20% - 40% of the enrolment.
5. less than 20% of the school enrolment.

1 2 3 4 5

VI In the intramural program awards are given in an activity

1. to team or group only.
2. to each member of a winning team.
3. to individuals having highest rating in several activities.
4. to individuals for participation in many activities regardless of achievement.
5. automatic "crest" or award for participation in the intramural program.

1 2 3 4 5

VII The intramural program is carried on for an overall period approximating

1. over 8 months of the school year.
2. 6 - 8 months.
3. 4 - 6 months.
4. 2 - 4 months.
5. less than 2 months.

1 2 3 4 5

VIII Intramural teams are selected on the basis of
1. achievement or motor efficiency test.
2. McCloy or other age weight height classification.
3. alphabetically.
4. by academic class grouping.
5. geographical or living area distinction.

1 2 3 4 5
○ ○ ○ ○ ○

IX The average number of extra hours per week beyond the normal required teaching load spent on physical education by the physical education teacher is
1. more than 11 hours per week.
2. eight to 11 hours per week.
3. five to eight hours per week.
4. two to five hours per week.
5. less than two hours per week.

1 2 3 4 5
○ ○ ○ ○ ○

X Is there an adjustment or some consideration given to the teachers who are responsible for extramural and intramural activities by
1. additional salary?
2. lightening of teaching load?
3. elimination of some supervising duties?
4. additional pay for coaching, supervision and conducting of games?
5. school time being granted for travelling?

1 2 3 4 5
○ ○ ○ ○ ○

Note: If some other consideration is given to a teacher other than those listed please state briefly.

XI With respect to coaching and supervision is it
1. always conducted by a physical education teacher?
2. usually conducted by a teacher in another field?
3. conducted by a non-staff member?
4. conducted by a student coach?
5. not organized but pupils permitted to play "on their own".

1 2 3 4 5
○ ○ ○ ○ ○

F. UTILIZATION OF COMMUNITY RESOURCES

If it is felt that this school being surveyed has adequate facilities and equipment to conduct a good physical education program the items in this section (i.e. Section F) should NOT be checked.

I Facilities outside the school grounds are used for (a) hockey, (b) track and field, (c) indoor winter activities, (d) sports requiring a field, (e) tumbling and apparatus work

1. four or five of these.
2. three of these.
3. two of these.
4. one of these.
5. none of these.

1 2 3 4 5

II Is any part of the community resources used by organized school groups

1. during school hours?
2. during noon hours?
3. after school hours before 6 p.m?
4. during the evening?
5. on rare or special occasions (or not at all).

1 2 3 4 5

III With respect to the school using the community resources are the community directors

1. extremely co-operative?
2. willing to give time and services during slack periods?
3. setting aside certain times for school use?
4. reluctant to permit school use of community facilities?
5. non co-operative with the school?

1 2 3 4 5

IV The school is used by members of the community for functions not relating directly to the school, such as, (a) different phases of adult education, (b) public use of school for "clubs", (c) use of school facilities for fairs, exhibits, etc., (d) use of school for community bingo, card or dance activities, (e) business meetings

1. four or five of these.
2. three of these.
3. two of these.
4. one of these.
5. none of these.

1 2 3 4 5

V If the community resources are utilized by the school, are the caretaking arrangements provided
1. free to the school?
2. for a fee to the school?
3. by volunteering pupils?
4. by pupils on an equal turn basis?
5. not considered?

1 2 3 4 5
○ ○ ○ ○ ○

VI If the community resources are utilized by the school, is the distance from the school to the centre
1. less than 200 yards?
2. 200 - 440 yards?
3. 440 - 880 yards?
4. 880 yards to one mile?
5. more than one mile?

1 2 3 4 5
○ ○ ○ ○ ○

VII If the community resources are utilized by the school is it because
1. an extra area is available for a fuller program?
2. community resources make for safer and more extensive activities?
3. equipment and supplies are more numerous or of better quality?
4. community facilities permit activities which could not be conducted at the school?
5. school facilities are inadequate?

1 2 3 4 5
○ ○ ○ ○ ○

G. CERTIFICATION AND TRAINING OF TEACHERS TEACHING PHYSICAL EDUCATION

I Indicate in the appropriate circle the number of university courses each physical education teacher has taken in physical education (i.e. 3 courses, check circle number 3)

	1	2	3	4	5
Teacher A	○	○	○	○	○
Teacher B	○	○	○	○	○
Teacher C	○	○	○	○	○
Teacher D	○	○	○	○	○

II Of the teachers on the staff teaching physical education indicate whether he (she) has a certificate in Physical Education

	Yes	No
Teacher A	○	○
Teacher B	○	○
Teacher C	○	○
Teacher D	○	○

III Of the physical education teachers on the staff indicate by checking Yes if he(she) has taken any physical education courses since 1945

	Yes	No
Teacher A	○	○
Teacher B	○	○
Teacher C	○	○
Teacher D	○	○

IV On the staff there are the following number of

	1	2	3	4	5
1. teachers with a degree in physical education.	○	○	○	○	○
2. teachers who have taken special courses in recreation.	○	○	○	○	○
3. teachers qualified to teach physical education but not doing so.	○	○	○	○	○
4. teachers participating in an in-service training program in physical education.	○	○	○	○	○

NOTE: -- After compilation of data received from the questionnaires a brief summary of findings will be made which will be available to you upon request.